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ANOTHER LETTER

TO A

YOUNG PHYSICIAN:

TO WHICH ARE APPENDED

SOME OTHER MEDICAL PAPERS.

BY

JAMES JACKSON, M. D.,

PROFESSOR EMERITUS OF THE THEORY AND PRACTICE OF MEDICINE
IN HARVARD UNIVERSITY.

BOSTON:

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1861.

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CONTENTS.

	PAGE
LETTER XVIII., ...	1
NOTES, ...	95
NOTE I. JOHN LOWELL, ...	101
" II. EXTRACT FROM LETTER TO DR.	
FORBES, ...	111
" III. REBECCA TAYLOR, ...	118
" IV. MR. PRESCOTT, ...	130
MEMOIR ON THE SICKNESS AND DEATH OF	
GENERAL WASHINGTON, ...	157

PREFACE.

A FEW years since I published a book entitled "Letters to a Young Physician." I did this with some hesitation, fearing that I was too old to venture on any work for the public. Nevertheless, I have now taken courage to prepare one more letter. Probably I should not have done this, if that book had not been very kindly received. Emboldened by that reception, I have more than once had it in my mind to write one or more letters on subjects, which, from time to time, have engaged my attention. But on reflection I have thought it wiser to leave the work to younger and abler men. Within the last year a grave question has been agitated among us, on which one, whose experience has extended

through more than half a century, may be thought qualified to form an opinion.

The question is whether there is any good to be derived from the practice of medicine. Our public in this little Commonwealth of Massachusetts was led to this question by the discourse delivered before our Medical Society at their annual meeting in May, 1860, by Oliver Wendell Holmes, M.D. Whatever is said, or written by that gentleman, will always produce an impression among us, and probably in other parts of the world.

Dr. Holmes did not present the question as I have stated it; but the matter has been treated as if he had done so. At least, some of our brethren have regarded him, as denying the utility of our art, and it was so understood by many persons not of the medical profession. It is because this question has been before the public that I have prepared the following letter. It may be admitted as some apology for

offering my thoughts upon this subject, that a large proportion of the present fathers and leading practitioners of medicine in our Commonwealth were pupils in our principal Medical School, while I was a professor there.

In regard to Dr. Holmes, it has seemed to me that he was misunderstood by those, who suppose that he maintained the negative upon the question above stated. His great object was to inculcate caution in the practice of medicine. He placed in a strong light the evils, which may be occasioned by the action of potent drugs upon a living body. He urged us to put a reliance on nature and to pursue what has been called the *expectant* plan of treating the sick in all cases, where the evidences in favor of some active practice are not clearly shown by experience.

Without discussing precisely the opinions advanced by my learned friend, I have met the question, which has in fact been en-

tertained among us since the delivery of his discourse. And in regard to this question I have not taken a side for, or against, the utility of medicine, in the style of a partizan. The stand I take is somewhat that of a witness, called upon in the character of an expert.

I trust it will be found that I have given my testimony fairly, with a regard to the oath that a witness is supposed to take. So far as it goes, I believe that this testimony will afford some support to the claims of medicine to be a useful art. I do not deny, but affirm that our art is imperfect. Taking the cases of disease as they are brought to us, it is not often that we are justified in employing heroic practice. But much may be done without adopting this practice. When a surgeon is called to a man with a broken leg, he places the limb of his patient, and in some measure his whole body, in a fixed position, using splints and bandages; and then he

watches him from day to day. He does not pretend that the processes of healing in the fractured bone are brought into operation by the splints and bandages, nor by his watching. But he has placed the injured parts under the circumstances most favorable for healing; and he watches that he may guard against everything, which can interfere with the salutary operations of nature, as well as that he may give to her any support, which he may think that she needs. Just so, the physician, in the larger number of cases under his care, makes it his business to dispose of everything relating to his patients in such a manner, as to give the best chance for the salutary operation of the natural powers. A good nurse, it may be said, may do the same. But the qualifications of a well-educated physician must enable him to take the care with much greater advantage.

I have not followed any strict method in this letter. After some introductory re-

marks I have named several of the most powerful articles of the *materia medica*, which are in use among us, and some minor articles analogous to each of them respectively, and have stated in regard to each what value I attach to them. In doing this I have necessarily mentioned the diseases, in which I have found them beneficial. Next, turning to the most prominent of the diseases we meet with, the acute diseases particularly, I have stated in which of these, and under what circumstances, I have found benefit from the employment of powerful remedies. While expressing my opinions on these topics I have allowed myself to go into details, whenever I deemed this might be useful. Indeed, when stating that benefit may be expected from the use of a medicine in a particular disease, it is often quite necessary to say in what way the drug must be prepared, and under what conditions it should be given.

In writing, I have had in view princi-

pally my brethren in New England, and especially the Fellows of the Massachusetts Medical Society. Indeed, I have felt almost as if preparing a circular letter to these Fellows.

To this eighteenth letter some articles are added which will, I hope, be read with interest by medical men, and not be without some attraction for general readers in the region about Boston.

The critic may note in this book the garrulous tendency common in old age. If he cannot, I can. I claim the apology, which the aged may always offer in such a case. When a traveller returns home, he has a right to suppose that his friends and neighbors will like to hear what he can tell of foreign parts. Just so, old men and old women are justified in the belief that the young will be glad to hear anecdotes of old times and notices of the people who were cotemporaries of their grandfathers. The travellers through the bygone years

and in the foreign countries, are both right. The care should be not to spin out their stories to too great a length.

Boston, March 29, 1861.

LETTER XVIII.

ON THE UTILITY OF MEDICINE.

IN my former letters I discussed questions of practice, referring to first principles occasionally, as far as seemed necessary to explain my views on practical matters. Now I turn to first principles—fundamental principles. Do not be surprised, however, if I seem to forget what I had set about, so as to run off continually to the consideration and statement of little details as to practice. I know my own tendency in this particular. The truth is that I consider it very dangerous to lay down first principles in any art, without a nice regard to the limitations of those principles, when applied to the art concerned. Listen a minute to an anecdote which I heard long ago, and which made a very strong impression on my mind. Roger Sherman of Connecticut, one of the Committee who drew up the Declaration of Independence in 1776, was not a graduate of

any college. He began life as a shoemaker; but he had a mind fitted by nature for deep thought. About the year 1793, when he was a member of the Senate of the United States, on some occasion, not one of the greatest importance, he addressed the highly respected members of that grave body, proposing to them some measure which he moved them to undertake. In doing it, he was extremely exact and cautious in describing the limitations to be regarded in bringing his principles into practice. He carried his caution so far as to amuse one of his friends and fellow Senators, who told the story to me, and who afterwards asked him why he was so careful in this instance. His reply was to this effect, — the laying down general principles is like building a stage, on which you are to take your stand. You must be cautious in building it; for if you make it too large, or without proper limitations, your opponents will have a chance to get upon it, and drive you off.

The question I am about to consider is, how far the sick are benefited by the care and prescriptions of the physician; — or, limiting the inquiry to the use of medicinal drugs, — whether the sick are more helped than hurt by them.

Scepticism in the art of medicine is not new. Probably it has existed from the days of Hippocrates; at any rate, I know that it has existed as long as I have been engaged in professional life; which means for a term of sixty years. Sometimes the wits have laughed at the doctors; sometimes the philosophers have called them into the court of science, there to show cause why they should not abandon the use of powerful drugs altogether; urging that such drugs manifestly do harm; and that they were bound to show that the benefit from them was greater than the evil. In truth, it has not been very uncommon, for an old practitioner of medicine himself, to avow his doubts as to the real benefits to be derived from the treatment of diseases by heroic remedies.

If the question were as to the soundness of any *system* of medicine, old or new, I should always take my place among the sceptics. It is quite certain that more is required to make a system of medicine satisfactory, than can be furnished from our present stock of knowledge; although it is certainly true that we are better prepared than any of our predecessors. Before we can make a *system* of rational medicine, our stock of knowl-

edge must be increased in all and each of the various departments of our science. First, our physiology must be perfected in all its details; in regard to the elements of the human body, its structure, the powers belonging to its various parts, the functions performed by each of these parts, &c. Secondly, we must understand how, or in what mode foreign agents act on the living body; in what way they do good, and in what way they do harm. We should be able to ascertain when such agents modify the functions only, and when they lead to, or induce changes in the structure of the part they act on. We must be able to ascertain whether there are any natural processes, by which disease is removed; and, if so, in what cases this happens, and in what it does not; and when there are not any such natural processes, we should be able to point out modes of obviating the evils of the disease, the remedies which nature has furnished for this purpose, and their *modus operandi*. Such is a brief and imperfect sketch of what is required to make up a system of medical science. In all ages efforts to attain this purpose have been made; and accordingly systems more or less elaborate have been devised and published. Some of them have

been adopted by the learned, and been the subjects of temporary admiration and confidence. But no one of them, up to this time, has stood its ground after a full and thorough trial of it. The wisest and soundest practitioners have never placed their reliance on these systems, or not long. In all ages, such practitioners have looked to experience, and been guided by this in the treatment of the sick. And let me ask if there be any, among the useful arts, in which the same is not true. But the knowledge derived from this source comes slowly and with difficulty. It certainly has not yet led us to modes of practice, which are entirely satisfactory in all instances ; and the bold and the enterprising, in attempting to gain the requisite knowledge more rapidly, have too often inflicted as many evils as they have removed.

Many men, in and out of our profession, believe, or seem to believe, that disease must always be removed by medicines, ignoring in a good measure the spontaneous efforts, by which disease is brought to a happy termination in a large proportion of cases. These remarks are not new ; but I think it may be said that, at this time, there is a tendency on this side of the Atlantic and on the other, to

more rational opinions on this subject. At the last annual meeting of the Massachusetts Medical Society, Dr. Holmes, the distinguished Professor of Anatomy and Physiology in our medical school, delivered a discourse, in which the evils of over medication were portrayed in strong colors. I shall keep this discourse in view, while I offer the results of my own observations and experience on the utility of medicinal drugs in the treatment of the sick. I wish to draw your attention to the limits, which, in the present state of our knowledge, should be put to the use of these drugs. This is a large subject; and I do not dream of treating it fully and accurately. But I hope at least to offer some useful hints; and while thus engaged, I shall avail myself of any fit opportunity for practical remarks on the treatment of the sick.

An impression has been received, in and out of our profession, that Dr. Holmes meant to represent the medical art as useless, and even as productive of evil, at least so far as the administration of medicine is concerned. Somewhat similar opinions have been formed, by some persons, in respect to the faith of my learned friend, Dr. Jacob Bigelow, in the utility of our art. I do

not understand that either of these gentlemen is thus sceptical. They may, or may not place less confidence in the utility of the practice of medicine than I do. One hardly finds two men, who agree exactly on any practical question, though it be one with which both are conversant. I am happy to say that I accord generally with the opinions expressed in the writings of my two friends. I go with them in what may be called their conservative opinions. I have held the same for many years. Nearly twenty years ago Sir John Forbes published a review on the subject of homœopathy, in which he reprobated excessive medication. Immediately upon reading this review I wrote him a letter, designed to be private only, expressing thoroughly and clearly my agreement with him. Some extracts from this letter he published in the next number of his review, where it remains to testify to my opinions at that time. But my objections then, as now, were to the abuses of medicine. That I have faith in the usefulness of our profession and in the benefits to be derived from medicinal drugs, I have shown in the preceding letters published in 1854. I am not aware of anything in those letters which I wish now to retract. It is the errors and abuses

in medical practice, against which the three gentlemen, above named, have made war. The errors and abuses consist in the constancy, with which medicine is administered in all diseases and in all stages of disease, in the undue strength and doses of the drugs employed, and above all in the disregard of the spontaneous efforts for relief by natural processes, and the neglect of hygienic principles in the treatment of the sick. It is said, on the other side, that the sick are often unhappy, if medicinal remedies are not ordered for them. It is true, in many instances, when medicine is not prescribed for a sick man, even one who is intelligent, that he complains that the physician does not order anything for the removal of the principal pain, or trouble for which his aid had been invoked. But, in the great majority of cases, though not in all, I have found that a plain statement of the truth would satisfy the complainant; would satisfy him, I mean, that the physician was taking the best course. In connection with the foregoing I wish to state, emphatically, two principles, which I should be very glad to engrave on the memory of every medical man, and of all men, who may wish to derive benefit from the care of medical men. The first is that it is at

the very commencement of a disease that there is the best chance of arresting, or mitigating it by treatment. Patients have sometimes said to me that they had not sent for me a day, or a week sooner, because they did not know what was the matter with them, or how the disease was brought about. To this I have replied by asking if your house were on fire, would you delay calling for the firemen, till you found out how and where the fire originated? In truth the ignorance on the part of the patient, as to the nature of the disease and its cause, should be regarded as the best reason for asking a physician's advice without delay. The other principle is that when medicinal drugs cannot be employed with benefit, medical treatment may nevertheless be very useful. It is by hygienic treatment that the sick may be relieved, in many instances, especially when employed in the first stage of disease. In truth the wisest course for a sick man, who can have recourse to a physician, in whom he has confidence, is to call for professional aid as soon as he finds himself sick ; — and this, all the more, if he does not understand his own case. Having called his physician, the patient should submit himself to his control entirely, allowing him to delay any

active treatment, in order to watch the course of the disease, as long as he pleases ; or, on the other hand, to resort at once to the use of such active and powerful measures, as he may think proper. If the patient cannot trust the physician so much as this, he had better not employ him.

Let us now return to Dr. Holmes' discourse. The great principle which he endeavors to impress on the minds of his brethren is this ; — that medicinal drugs, generally, are articles which have some noxious influence on the person, to whom they are administered. He does not deny that they may be serviceable, but maintains that it is the duty of the physician, when administering them, to compare the possible evil, which may be produced, with the benefits which he is justified in expecting from it. So far nothing new is offered to the mind of the physician ; but this necessary caution may be more deeply impressed upon his mind by this forcible inculcation of it.*

* Let me here, refer the reader to my introductory letter in the " Letters to a Young Physician." See there, at page 18, a paragraph beginning on the eighth line, and also the paragraph following that which terminates on the 15th page.

We are questioned daily, especially by timid or cautious patients, whether the taste of the medicine proposed will not be offensive, whether it will not give cause for pain or distress, and whether it will not be productive of weakness, or of other evils. On these points the physician answers, as the case may be, that indeed such and such evils may be produced, but he states that in his opinion the benefits will be greater than the evil consequences, else he would not make the prescription. Though a conversation like this does not occur in every instance, yet it is presumed that the prudent physician does always have these questions in his mind, and that he would not make his prescription, if he did not think the chance of evil much less than that of good. But Dr. H. wishes his medical friends to look at this subject with peculiar care, and he fears that there are some among us at least, who, being accustomed to the use of powerful medicines, become forgetful of the grave and injurious consequences to which they tend, or which at least they may produce. He brings before us a statement of the evils in a numerical form. Supposing the vital power to be represented by 100, he estimates, by way of example, the evil occasioned by the medicine employed at five

per cent. ; and then it follows that twenty such doses would take away all the vital power ; that is, it would destroy the life of the patient. This must follow on the supposition ; but we may ask Dr. H. if he has not made a very violent supposition. It is by the way of example he states the risk at five per cent. ; but, when one makes such a statement, it is presumed he will take an instance within ordinary limits. It is undoubtedly true that ignorant and rash men may often subject their patients to such a risk. It is true that a wise and prudent physician will sometimes do the same, when he thinks the risk of death from the disease is very great. Surgeons perform operations every day, from which the risk to life is very much more than five per cent. ; but it is because the risk from the disease is forty, sixty, or ninety per cent. But it is very rare that the risk to life from a single dose of medicine amounts to one per cent. The risk, however, from a continued use of a powerful drug for weeks, or months, may be as much and a great deal more than five per cent. This risk is, I fear, sometimes incurred without sufficient consideration. We can all see that in the common practice of the last age such a risk was incurred too frequently. It can do us no

harm to have our attention strongly directed to the subject, so as to lead each one of us to inquire whether we, at the present day, are sufficiently cautious.

When Dr. H. spoke of sinking all the drugs in the sea, he did not mean to be very literal. If we contemplate the act proposed, we must see that he must be more of an autocrat than Peter the Great, Emperor of all the Russias, before he could put his proposal into execution. If he could take up all the mineral medicines in the market, he could not take away the demand for them ; and the demand would bring the supply, even though that supply must be sought for in the deepest mines. And as to the vegetable and animal articles of the *Materia Medica*, if he should empty the shops of the druggists from San Francisco to New York, it would only insure us a clean stock the next year. Our friend was not understood to mean literally that he would fill up the Bay of Massachusetts by pouring into it all the drugs in these United States. But I do understand him to say that he thinks that medicinal drugs, as used in this country and in Europe, do on the whole cause more harm than good. Is this opinion strictly correct ? It is not agreeable to make such

a statement, but I must acknowledge that I have been in the habit, for many years, of giving advice which corresponds with this opinion in some measure. To friends about to travel whether on this side of the Atlantic or on the other, I have said, "Do not employ any physician unless you can ascertain, on good authority, that he is regularly bred and likewise has the character of being prudent and discreet." I agree fully with Dr. Holmes that there is a very great risk of evil from active practice, conducted by persons imperfectly qualified.

The chance of evil resulting from an indulgence in the use of alcoholic beverages is analogous to that of the indiscreet use of powerful medicines. These beverages, used with discretion, are in my opinion blessings, for which we should be thankful ; but it would be difficult to state, though we should employ the strongest language, how great are the evils, direct and indirect, produced by alcohol as actually employed. It has often been a question in my own mind, whether the benefits from this article could be as great, as the evils connected with it. I have not decided, however, that discreet men should abandon it on that account ; — for it is my belief that those evils could not be prevented, if

every discreet man on the earth should abstain from using it. I would say of medicinal drugs, as I do of alcohol, that prudent men need not hesitate to employ them, because other men make an improper use of them. These are opinions to which, I believe, my friend, Dr. Holmes, would give his assent. I wish, therefore, to be understood as being of the conservative party in respect to the use of medicine, though I am not prepared to give it up altogether.

Let me now examine these powerful medicinal drugs in some detail, and give my opinions respecting their value. When I began my professional studies, my old master, pointing to the numerous drawers and to the bottles arranged on the shelves in his shop, said to me, "I seem to have here a great number and variety of medicines, but I may name four, which are of more importance than all the rest put together; viz, Mercury, Antimony, Opium, and Peruvian bark." It is more than sixty years since this statement was made to me by my respected teacher. From that time to this, scarcely a day has passed, in which I have not seen one, or more of these articles in use among the sick. What is my experience as to their value? I proceed to state it with as much

fidelity and accuracy as I am capable of. Let me treat of each of the four articles above named, in its turn, referring at the same time to others having the same, or similar properties, with each of them respectively.

To the first two, Mercury and Antimony, as well as to some other metallic articles, there are certainly grave objections. They are capable of doing great mischief. They should not be put into the hands of children, nor into those of any ignorant, or unprincipled men, any more than gunpowder or bowie-knives. But I should be very sorry to be entirely deprived of either of them. I have directed the use of them for my friends, and have employed them on myself, when occasion called for them; for it has always been my rule to administer to my patients those articles only, which I would employ for myself under like circumstances. Following this rule, I should wish to keep on the list of my *Materia Medica* — Mercury — Antimony — Arsenic — and some other potent metallic medicines.

Among these articles, no one is more commonly viewed with abhorrence than Mercury. It is well that it should be so. It has been used within the last hundred years with too much liberality, and

often to the great injury of the sick. Yet, when employed discreetly, it may be given even to children, during early infancy, during the period of the first dentition. For them, calomel in a single dose, may often be employed with great relief, and with more advantage than any other drug. They are specially subject to disorders in the first passages, and by it these may be cleared out more efficiently, and generally with less inconvenience than by any other article. But the use of it should not be continued. If one dose seem to have removed half the disease, we must not expect to remove the other half by a second dose. If a derangement in the digestive organs has brought about a necessity for the administration of it, we must subsequently insist upon such care as to diet, air, exercise, &c., as will perfect the cure, and will prevent the recurrence, certainly will prevent the frequent recurrence of the same derangement, for which the medicine had been administered. For though the benefit from one dose may be much greater than the evil produced by it, yet it may be too much to incur the risk of this evil anew every few days. Calomel should not be made familiar in the nursery, as a convenient brush or broom, by which to clean up that

apartment as often as the children have got it dirty. I give this caution, for this reason. Though many mothers have a fear of the use of calomel for their children, there are others who do not hesitate to keep it on hand, and to administer it at their own discretion. For adults, also, this article, as well as the blue-pill, may be given in a single dose with undoubted advantage. By a certain class of persons it is regarded with great favor; by those, I mean, who indulge their appetites too freely. But by them even, although they may generally be in vigorous health, it must be used with discretion. It is not well for them to make free with it. The patient who begs for it, will be greatly vexed if it treat him roughly. Early in life, my old and much respected friend, the late Dr. James Lloyd, told me the story of a case, similar to what may have occurred within the experience of many of our brethren. A hundred years ago, Capt. A. B. having a severe colic, sought relief from Dr. Clarke. He begged the doctor not to be sparing in his remedies, to give him the most powerful, and those in the fullest doses. He demanded heroic practice. He asked for calomel especially, from a vague, though erroneous notion, that it was the most powerful of cathartics. Dr. C. yielded to his

solicitations, and after due time obtained relief for his patient ; but, within two days, the patient began to have a sore mouth, and ultimately the affection of his mouth was so severe, that for several days he could neither eat, nor speak, without great distress. The captain now became more impatient under the new disease, than he had been under the colic. In this speechless state he sat at his table, and gave vent to his feelings by writing every few minutes, — “ Damn Dr. Clarke.” This poor patient realized how true it is that a medicine may do a certain amount of harm, which is to be taken into the calculation when the physician attempts to do good with it. In passing, let me here remark that I think calomel should never be employed in a case of great constipation ; for in such a case, if it be not effectual at once, being retained in the body, it is very likely to produce its peculiar effects on the mouth. Besides this, calomel is not the best medicine for removing a great constipation. Its peculiar excellence is that it acts on the stomach, and the upper part of the intestines. It is not so certain as some other articles, to induce a speedy evacuation of the whole canal. But I will not go on to mention the occasions proper for using this article ; several of

these have been noticed in the preceding letters. Of course, every medical man knows that there are occasions, which justify the use of mercurial preparations, until the mouth is made sore.

I mention Antimony next to Mercury. In a report, made more than twenty years ago, upon Typhoid Fever, founded on cases in the Massachusetts General Hospital, I showed what benefits had been derived from the use of this article, as an *emetic*, when administered on the *first day*, or even within the first three days of that fever. I brought up this subject anew in the 17th of these letters. It is because I think it for the common good that physicians should be duly impressed with the value of this remedy in typhoid fever, that I now bring the subject before them again. That they may avail themselves of it, there is one point to be studied, which I fear is not always studied with sufficient care and exactness. The point I refer to is the diagnosis of typhoid fever on its first days; on its *first day*, if possible. I will begin by acknowledging that on the first day of this disease, even if the patient be brought distinctly under the physician's eye, the symptoms of it are often so slight and shadowy, that it is with difficulty the disease can then

be recognized. It is almost impossible, by verbal instruction, to prepare any man to detect the disease thus early, in every instance. As in the cases of many animals and plants, with which you would make your pupils acquainted, you must take them to the objects, in order to make them familiar with their characteristics. You must show them the specimens. How then shall the pupil, or the young physician get this knowledge, by which to recognize typhoid fever at its very onset? Let him avail himself of the opportunities afforded every few years, in New England at least, when this disease is prevalent. Then he can make himself familiar, by daily observation, with the phenomena of the disease in its various stages and under its various forms and shapes. In fact, during a season, when the public are under an alarm from the epidemic, patients are oftener induced to call for advice on the first appearances of disease than in ordinary seasons; and in two years of such an epidemic, if not in one, the medical man may, with diligence, acquire such a knowledge of the disease as will subsequently save him from doubt, at least with rare exceptions. But he must first study it with the specimens in his hands, or before his eyes.

Let it be granted that we cannot arrive at absolute certainty on the first day of typhoid fever, yet, at least where it is epidemic, we may be sufficiently certain for practical purposes; and, when it is not epidemic, the careful observer may be sure enough, ordinarily. It is true that an antimonial emetic has a powerful influence on the system, and should not be given from trifling considerations. Yet when one is as well assured, as I am, of the great benefits which this remedy affords in the very commencement of this disease, he will feel justified in taking some risk. Consider for a moment the amount of evil to be ward-off. In typhoid fever, left to itself, one must ordinarily pass through two weeks of severe sickness, two to three more weeks of confinement to the house; and again, from two to five more weeks, before he is truly fit to return to his usual occupations. During most of this time there are the evils of prostration and debility; during a portion of it those of pain, — often great pain and distress; most commonly for some days there is delirium, and often great delirium, and to all these must be added the risk of life. This is a great risk. I cannot put the proportion of patients, to whom the disease proves fatal, when

not arrested by treatment, at anything less than one in seven. In some seasons it is much less fatal than this, but in some it is much more so. Viewing the antimonial emetic, administered on the first day, as creating almost a certainty of a speedy and safe termination of the disease, I think I may say that the remedy ought to be employed in every case, where there is an even chance that this disease has begun its course. For myself, in such a case, I should not hesitate. But why do I express myself thus? I have been placed precisely under these circumstances, and I did avail myself of the remedy promptly. This was in 1814, when the disease was very prevalent among us. I was attacked in the evening, and I took the emetic about midnight. I acknowledge that a physician is very liable to err in regard to himself; I should not therefore mention this case, as one in which it was certain that the disease had taken hold of the patient, though I have no doubt on the subject. But I mention it, as showing the strength of my conviction of the advantages of the remedy, and to show that I employ for myself what I prescribe for others. Let it not be forgotten that, when the remedy has been employed at the very commencement of the disease, the patient should

not think that he is now safe; he should be regarded as a sick man for several succeeding days, even though he should appear to be entirely relieved of all disease. If he will not do this, he will be very likely to bring on the disease anew.

I have not stated the evils of this disease sufficiently. Of those who recover from it, not a few continue unfit for the common duties of life from three to six months, during which time secondary affections often make their appearance. And it is not uncommon to meet with persons, ten and twenty years after they have undergone this fever, who refer to the period of it as a marked era in their lives, since which they have never enjoyed perfect health.

The greatest benefit, which can be derived from antimony, is that to which I have here referred; but there is sufficient evidence that it is useful in typhoid fever, when running its course;—useful in mitigating its severity, and perhaps in shortening its duration. It has similar good effects in some other affections, when employed in such doses as do not ordinarily prove operative. It has had a reputation for producing favorable effects in febrile affections, and in certain inflammatory diseases for several ages. It can

hardly happen that it should have retained this reputation among physicians, maintaining very diverse theories on pathological and therapeutical points, if it had not in some measure deserved it. That it has often been used, when there was not a sufficient occasion for it, and that it has been employed rashly and too freely, and that it may have been productive of much injury, I do not doubt. But we should not discard it on these considerations; we should only study, with increased care, when and how it ought to be prescribed. For its use in typhoid fever, after the earliest days, I will refer to my Report on that disease already mentioned. I might refer, no doubt, to better and higher authorities; but I mention that as containing the results, at which my mind had arrived. I think this medicine may be used in pneumonitis and inflammation in the internal viscera generally; also in cases of inflammation of the mucous membrane, even when this is not sufficient to induce strong febrile symptoms. To this general remark an exception must be made,—as to cases of inflammation of the mucous membrane of the stomach. In acute gastritis there is scarcely any medicinal article, which will not offend the stomach; and we may

say nearly as much of even the mildest articles of diet. The same may be found true in acute inflammation of the duodenum. But when the inflammation is seated in the lower part of the small intestines, and yet more, if in the large intestines, I think that antimony may be employed, though ipecacuanha is usually preferable. It is, however, especially in the affections of the mucous membrane of the fauces, of the larynx, the trachea and the bronchi, that I am in the habit of using antimonials in small doses. In such cases, I most frequently add opium to it. In affections of the windpipe and bronchi, where cough and expectoration are produced, we may for a time arrest the cough by opiates alone ; but an easy expectoration is more certain to follow when antimony is added to the opiate. If these articles, in combination, be administered at bed-time, for a few successive nights, the duration of the disease will generally be shortened. To be successful, we must study to give the right doses, so as to obtain the greatest good with the least inconvenience. A reasonable regard to diet and some other things is necessary to secure the most favorable result. When a bronchitis is severe at the beginning, in a person who can endure the use of medicine

without much trouble, it may be well to employ these two medicines from the commencement of the disease. In such a case and wherever the opiate is to be employed, for several days in succession, it will generally be found necessary to combine with these two articles some laxative medicine. I prefer, however, to abstain from the use of opium except where the cough is protracted, or where the patient is particularly liable to protracted coughs. On the other hand, in some instances, where the bronchitis appears to extend very widely through the lungs, and to continue obstinately, we may add to antimony and opium another powerful drug; — powerful for harm when employed indiscreetly, but certainly often very powerful for good. The article I refer to is calomel. For an ordinary adult we may add from one to two grains of calomel to each of the evening doses of opium and antimony. Such a dose, in an urgent case, may be taken on two successive nights; but ordinarily it should not be repeated on two successive nights. The antimony and the opium may be continued every night, but the calomel only on every second, or every third night. It is very seldom proper to repeat the calomel more than three times after the first

dose. Indeed, there will rarely be a want of it, if the affection is bronchial only. It very seldom happens that we need to employ the antimony, or the calomel, for young children in cases of bronchitis. Yet we may sometimes do it with unequivocal advantage, even for them. In children, as early as the fourth year, we occasionally meet with protracted bronchitis causing a frequent and very annoying cough through the day and much more in the night. In such instances I have long been in the habit of employing what I have called my "puerile pill," and usually with most marked success. When the disease has been bronchitis only, not combined with any other disease, the pills, I have used under this name, have contained the following articles, viz :

Of Tartarized Antimony,	One grain.
Of Opium, ...	One grain.
Of Calomel, ...	Ten grains.

And these articles, mixed with mucilage of Gum-Arabic, have been divided into eight, ten, twelve or fourteen pills, according to the age and constitution of the patient. I have given one of these at night, and most commonly a second on the first or second night afterwards. I have very

rarely used any more ; for though the disease has not been entirely removed, yet it has been so decidedly relieved by two pills, and often by one, that there was no inducement to give more. I ought to say that the first dose will most commonly occasion some vomiting, and will almost always prove cathartic, sometimes violently so. But the evil from these effects is usually very transient, and this is fully compensated by the marked relief. To my friends, who are fearful of the use of strong medicines, I will say that a few trials in cases worthy of the remedies, would, I believe, remove their apprehensions. To those on the other hand, who believe that when one dose proves to be very useful, a second and a third will be equally so, I may quote here, as well as on many other occasions, an old saying, That two and two do not always make four. To the use of antimony, combined with other medicines, as above described, I have given close attention for very many years, during my pupilage, and ever since, and I believe that my commendations of the same are expressed in very moderate language. It will not be supposed that I claim to myself any originality as to this mode of using antimony and so forth. I mean only to add my testimony to

that of others. I will not waste time in discussing the "*modus operandi*" of these medicines. On all practical questions, if others will agree with me as to the results produced by any given mode of treatment, I am satisfied without any such discussion.

A few remarks will be added on Ipecacuanha, a vegetable article similar in many respects to antimony. Where the object is merely to unload the stomach, this is preferable as an emetic to antimony. Though more offensive to the taste, it is more mild in its operations. For young children, especially, and for all tender subjects, it is the most appropriate. It is not only as an emetic that this medicine is a substitute for antimony. Though more feeble than this last, it supplies its place in some measure as an anti-febrile medicine, and still more in combination with opium in bronchitis, dysentery, and some similar diseases. I will not omit to say it produces asthma in some few individuals, even from handling it. To such persons it should not be given.

The Squill is another article sometimes employed as a substitute for antimony, or more commonly combined with it, as an expectorant. It is very valuable for this purpose. But I have mentioned

the squill principally to comment on one good property, which it is known to possess, but for which it is not sufficiently valued ; I mean that of a diuretic. From my own experience I venture to say that the reason why it is not sufficiently valued in this respect, is that it is not usually put to the test, in such doses, as are requisite for the purpose.

It is well known that dropsy is ordinarily an effect of some organic disease, such as is seldom removed. Nevertheless the dropsy is often relieved temporarily, — for weeks or months, or occasionally for years. This takes place spontaneously sometimes, but much more often by the use of medicine and especially of diuretics. In such cases the squill always deserves a trial before resorting to more powerful articles, except in very urgent and distressing cases. It succeeds in most instances, and though it may occasion some nausea, this is seldom severe, or long continued. I think that the tincture is the preparation of squills the most convenient for this purpose, because its dose is readily graduated to each individual case. It should be given in such quantity as the stomach will bear without nausea, three times a day. It is best to begin with twenty-five drops for a dose, and

to increase it gradually. Ordinarily an adult can bear thirty-five drops, but some bear more and some less.

Some other medicines might be mentioned, more or less similar to the antimony, &c., but this is not necessary to my purpose.

As the third among Dr. Holyoke's four great articles, comes Opium. It relieves pain ; this is its great power. Where immediate relief is required, and such as shall not be transient only, it certainly takes the first place among anæsthetics. There is not any substitute for it in such a case. Sulphuric Ether and Chloroform will operate more immediately ; but the relief they afford is very transient, unless the remedy be constantly repeated. There are other vegetable narcotics, besides opium, to which we may sometimes be glad to resort, where the effects of opium are particularly annoying. Conium and Hyoscyamus are very feeble compared with opium, yet we succeed with them in some instances. It is necessary to begin with the use of these in moderate doses, although these medicines rarely produce decided effects until large doses are administered. Stramonium is much more powerful, and hence must be used with great caution. It may produce more or less of

blindness, even in moderate doses ; and life itself is endangered by it in large ones. Aconite is so hazardous, when used internally, that it should never be resorted to, except on very extraordinary occasions. Employed *externally*, in a saturated tincture, it is not hazardous, and sometimes gives relief to severe pain. I should be unwilling to banish either of these articles ; and without opium, I should hardly be willing to practice medicine. At the same time, I resort to this invaluable drug with reluctance, and especially to a continued use of it, even for a few successive days, and with still greater reluctance for longer periods. In regard to this drug especially, I may say that it should never be prescribed without bearing in mind the evils it may produce. Some persons can take it without any, or with only very little inconvenience ; but there are a few in whom its effects are very distressing. There are persons in whom they are so much so, as to forbid the use of it entirely. It takes away the appetite, and impairs, — often destroys, — the power of digesting food. It constipates the bowels, and checks all the secretions and excretions, except cutaneous perspiration. And, very frequently, it prevents perfect sleep. I say this notwithstanding it is regarded as the

first of soporifics. After long continued distress, or pain, it sometimes produces calm and refreshing sleep. When sleep has been prevented by a cough, it may often be obtained by an opiate in a very moderate dose. But, in a large proportion of cases, the sleep produced by opium is imperfect. Especially the mind gets no rest. It is disturbed by dreams, and often by such, as are very distressing; and it is not productive of any refreshment. Such are the effects on many subjects. Some persons, more fortunate, are always soothed and tranquilized by opium, and think of it only as a comforter. For such persons, if the occasion require, we may be more willing to protract the use of it. But when long continued, I believe that it always undermines the constitution.

The last and fourth of the articles mentioned by my old master, is Cinchona, — the bark of the cinchona, — which in my youth was familiarly called *The Bark*. It is regarded as a specific remedy for the Fever and Ague. It used to be thought that, if the physician would “put down the Bark” in full doses, it would certainly arrest an intermittent fever without any other medicine. But I believe that those who have tried it much

in malarious districts, have found it best to prepare the patient, and especially to attend to the stomach, into which it was to be introduced, before administering this potent drug. As it was often necessary to administer this bark in large quantities, the task of taking it was a severe one. At the present day we employ the Alkaloid derived from the cinchona, known as Quinia, or Quinine, of which the doses are so small in bulk, as to remove the terrors of it. This medicine is employed not only in regular intermittent fever, but also in the irregular intermittents and remittents, such as are often epidemic and pestilential in hot climates.

There are other diseases, which have intermissions more or less regular, in which the cinchona, or its alkaloid, may be employed with great advantage. The most distinctly marked of these is the intermittent Hemicrania. It has appeared to me, as I have stated elsewhere, that the effect of this medicine is to take away the disposition to, or the susceptibility of, certain diseases, some of them not intermittent. When exhibited in full doses, it will often put a stop to those painful affections, which occur independently of inflammation and of any organic disease, and appear to be functional disorders in the nervous

system. In these cases it is not necessary to the beneficial use of the medicine, that the pain should have any regular periods, such as we see in the intermittent hemicrania.

I may repeat here what I have said in the 16th Letter of this series, 320th page. In that letter I mentioned its good influence in arresting certain cutaneous diseases, of which the furunculi (boils) furnish the most remarkable instance. In all these cases, where the intention is to overcome the susceptibility to a disease, I consider it requisite to begin the use of the medicine in large doses. A little of it will not do a little good ; it even does harm. Beginning with small doses, and gradually increasing them, it seems to me that the system becomes accustomed to the medicine, so that even large doses afterwards fail to do good. The evils produced by this medicine are—a sense of stricture in the head, noises in the ears, not usually very distinct, and a slight deafness, or a diminution in the power of hearing. To avoid these evils, when they are great, and sometimes because the patient is under some other disease, which is thought to forbid the use of the quinia, we substitute arsenic. The name often excites some terror. It may be used so as to destroy life ;

and so may opium, and so may a lancet, or a scalpel, if placed in improper hands. But as arsenic has a bad character with many, I feel bound to testify that it is mild and gentle in its effects on the human body, as almost any efficient medicine ever employed by us. If the physician watch its effects from day to day, his patient will seldom experience as much trouble from it, as is often brought about by quinia. General experience bears witness to the good effects of arsenic in intermittent fevers, and in various chronic cutaneous diseases. I am aware, that in these last, the good effects of this medicine are attributed to some salutary operation upon the blood. It is so regarded, when, in the language of the day, the disease is called a blood-disease. It may be that this is correct. I do not profess to have penetrated with any success, the arcana of blood diseases. But, to my mind, the explanation above suggested, in regard to the good effects of the cinchona and arsenic in intermittent diseases, and on those which are frequently recurring in the same subject, though not at regular periods, is much the most satisfactory. I know that we may be told that both these remedies are tonics; but I have not found them acting as such in these cases.

In regard to quinia especially, I can say, that, when exhibited in full doses, it does not manifest any effects, showing that it acts as a tonic. If I wish in a debilitated subject to increase the appetite, or to fortify the stomach in any way, I may give the sulphate of quinia, in doses of one or two grains, twice or thrice in a day, and often with good effect. I agree that its effects are tonic in those instances. But when I give from fifteen to twenty-five grains in a day, I usually find the appetite is diminished, and that the power to digest the food is diminished also. Yet it is in the large doses that it arrests an intermittent fever, and prevents the recurrence of neuralgia. Therefore it is that I say, it is not by its tonic effects it stops the intermittent fever. If we attribute to this medicine, when given in large doses, the power to arrest the disposition to certain diseases, we can explain its effects in diseases apparently quite diverse from each other. Similar remarks may be justly applied to arsenic.

Iron is a medicine similar in some respects to cinchona, and it is among the medicines which no one would be willing to dispense with. In diseases, in which there is a deficiency of the red globules of the blood, benefit may often be ob-

tained from the use of iron internally. For this purpose it need not be given in large doses. Whether acting as a nutriment, or as a tonic, in some way, certainly, it often operates to restore the strength of debilitated subjects, especially where there is not any organic disease present. There are many preparations of it in use, some of which are effectual in small doses, and cannot be borne in large ones; while others, as the carbonate and phosphate, may be given in very large doses. It does not appear to be more useful as a tonic, when employed in large doses, nor does it always produce any increase of tone. But when employed in large doses, it does appear sometimes to have an effect on the nervous system. From my own experience, however, I judge that it cannot be relied on, so much as quinia, for the relief of chronic pains, or of neuralgia.

There are many sub-tonics, as they are sometimes called, which might be brought into notice in connection with these remarks on cinchona, and which I think no experienced physician would be willing to dispense with. Among the principal of these I place Bismuth, Cascarilla, and Quassia. There is one other article, in much use at the present day — I mean Cod Liver Oil —

which deserves to be noticed as a restorative, if not a tonic. It is certain, that persons, who are much emaciated and much debilitated, often undergo a great change while using this medicine. Its effect in giving to the patient a coating of fat might lead one to ask, if it does not operate as a nutriment; but I believe it has been found that the addition to the weight of the body, when it has been used three or four weeks, is actually greater than the weight of the oil which has been taken. While the patient becomes more corpulent, from the use of this oil, he is generally stronger after it. Thus we may be authorized to suppose, that, if it acts as a nutriment, it also acts as a tonic. We still wait for further experience to decide us as to its true influence.

I have thus been treating of various medicines, more or less similar to the four great articles pointed out by Dr. Holyoke. I have mentioned those only, which have occurred to me as best established in their character without professing to have looked carefully through the list of the *Materia Medica*. I will now bring into view some other drugs, or medicines not allied to those four articles. And first, of the tribe called Cathartics. Of these we have a great variety;

the harsh and powerful, the light and gentle. Some of these we employ when we want only to empty the bowels of their ordinary contents: some can do more; they promote the watery secretions. These are called drastic cathartics. There is not any tribe, or class of medicines so much used as this. It would seem that we could hardly live without the use of cathartics. They are necessary. But the abuses in their use are enormous. For the great mass of mankind, who labor in the open air, and who are provided with food tolerably well adapted to the powers of the digestive organs, these medicines, like other medicines, are very rarely needed. But in civilized communities, in cities most especially, there must always be a large proportion of men and women who pass most of their time, in houses or offices, and without sufficient exercise, or without that which is of the best kind. Among these persons cathartics are much used, — too much. Yet, under the actual circumstances of mankind, they cannot be entirely dispensed with by such persons. The rich and luxurious are very prone to live inactive lives; or, if they go abroad, their exercise is often passive only. Preaching to such persons is sometimes very useful: but, too often, I have

found it useless, as much better preaching often is. I believe that some patients say to themselves, if not to us, what are doctors good for, if they cannot prescribe some remedies in these cases, less troublesome than diet and exercise? Alas! neither Emperors, nor Empresses can command any other remedy, that is consistent with health.

There is a large proportion of the employments, by which the inhabitants of cities, and of manufacturing districts gain their livelihood, which are necessarily sedentary and within doors. Among all the persons thus described, we find more or less failure in the functions of the digestive organs. This failure is increased when the food best adapted to such persons cannot be obtained. Persons thus circumstanced are compelled to seek aid from the physician. It is first of all proper for him to make them acquainted with the causes of their ill health. He should point out to them the necessity of exercise in the open air, and the changes in diet, which, in each case, respectively, are necessary for their relief. But, after his best efforts, he will find many, who either will not, or cannot obey the hygienic rules, which he points out to them. Thus, at last, he is driven every day to allow, or direct some of them to use medicine for relief. It

is an evil to which the feeble, especially if poor, must submit. Shall we reproach a widow, who supports herself and two children by her needle, and in doing it often sits up half the night, — shall we reproach her, because she does not follow our prescriptions as to diet and exercise?

In addition to the call for cathartics for the causes above stated, there is very frequently a propriety in employing the same for temporary and transient disorders. In the commencement of acute febrile diseases, even although they be self-limited, so that we cannot hope to remove them by any treatment, cathartics may usually be administered with more or less benefit; at least, so I think. Some of the wisest among my brethren think otherwise. I believe that experience justifies my opinion. It seems to me that it is easy to explain in what way this depletion, under such circumstances, is ordinarily, though not always, beneficial. The intestines are almost never empty. On the other hand, they ordinarily contain, in health, a certain amount of fecal matter, and that sufficient to make up several such discharges, as are usually produced by a cathartic. Such a quantity is commonly found on hand, when a man is attacked with an acute disease. If he had remained well,

a due portion of it would probably have been discharged on the day of his attack, or on the following day. From the influence of the acute disease the intestines become incapacitated, in some measure, for performing their functions with their usual vigor. Meanwhile, by the undue retention of their contents, the whole system is embarrassed. Left to themselves, the intestines may labor on, for several successive days, before they can be fully relieved, and from this cause the general disease is augmented. Precisely this state of things, I have very often witnessed. If, under the use of some moderate laxative, the desired relief can be hastened, the patient may go through his disease with less discomfort, and ultimately with less reduction of strength. Such, I believe to be the true explanation of the good effects, which are usually experienced from cathartics in the commencement of acute diseases. I believe that the same benefits ensue, upon the same treatment, in surgical cases where patients are suddenly brought to the bed, and become affected with symptomatic fever. On the other hand, if the patient, to whom such a prescription has been found distinctly useful, is treated with a repetition of the dose every day or two, great evil ensues.

This is one of the abuses of medicine, which is rare among us at the present time, but of which however we sometimes continue to see instances.

I might go on to show other occasions, on which cathartic medicines may be properly ordered, but I believe it will be enough to refer to my letter on Constipation, and to passages in other letters of the preceding series for statements on these points. My main object at present is to bring into view the medicinal drugs which I should not be willing to discard ; yet, while doing this, I endeavor to intersperse such practical remarks as I think may be found useful.

I have not forgotten that Dr. Holmes advises us to think more of the expectant treatment of diseases, then we usually do. I go with him to certain extent, perhaps as far as he does. There are some acute diseases, in which it is best to do so from the first ; — and it more frequently becomes proper, when the early days have been passed over before medical aid is called for. In many chronic diseases, from which recovery cannot be expected, much may be done to render the patient more comfortable. But in such it is oftener by hygienic measures, than by drugs, that we do the most good.

There have been many abuses of medicine among the regular practitioners beyond doubt. But I am willing to believe that this is much less common now, than in some past times. If our profession has furnished many heroic practitioners, many who have distrusted nature altogether, or who are not willing to wait for her tardy steps, it has also no doubt in all ages furnished those, who have not published their opinions, but who have calmly and quietly watched the course of diseases under their care, and by gentle means, and only when the powers of nature seemed much embarrassed, have ventured to employ any potent drugs. There is perhaps always a tendency among physicians to pursue this course, as they advance to old age. Unquestionably this is often the right course. But, far advanced as I am in age, I am not yet ready to adopt this course entirely. I am fully convinced that, in the early stage of diseases, powerful remedies may be employed with great benefit. Indeed, it is scarcely necessary for me to say this, since in this letter, as well as in others which have preceded it, I have named many diseases, in which I have advised very active treatment under these conditions.

There is a tribe of diseases which must be permitted to have their own way, if I may use the expression. For instance, when the measles, or the small-pox has begun its course, it cannot, if life continue in the subject of it, be prevented from going through its regular steps. But even in these cases, when from any cause the disease is peculiarly violent, aggravated by untoward circumstances, we may often do something to diminish these accidental evils. Indeed, more may be said, if Sydenham and many of his followers have not misled us; merely by the free exposure of a patient under the small-pox to cool fresh air, we may always lessen both the suffering and the risk attending that disease. If it is said that no drug is used in this case, I reply that a powerful remedy is used, and one which was at first thought to be attended with great danger. Diseases like these, which, when they have begun, must pass through certain stages, and which sometimes terminate fatally, have, as you know, been denominated by Dr. Bigelow, *self-limited*. Although the view, which he took of this subject, was not altogether new, yet he brought it much more clearly into the light than had been done previously, and pointed out the uselessness and

the frequent evils of an attempt to arrest diseases of this tribe. I think no reasonable man will now hesitate to admit the justice of his opinions and the importance of regarding them in practice.

There is however a point yet to be settled. What are the diseases which are included in this natural tribe? Dr. Bigelow has mentioned many, without professing to exhaust the subject. I agree as to most of those enumerated by him, but not as to all of them. I have some doubts as to erysipelas. I have much more as to typhoid fever, as I have stated in my seventeenth letter. Generally, it may be true, as to some diseases, that they are self-limited, when they have arrived at a certain period; when, for instance, they have passed the second or third day, but not before. Dr. Bigelow has also placed epilepsy among the self-limited diseases. How far this is correct, is to be tested by experience. I am fully convinced that all active interference, during the fit, is useless and may be injurious. But, viewing the disease as a whole, regarding the patient as having at all times a liability to the epileptic paroxysm, the question is, can this liability be removed? My reply to this has been

given in the second of these letters. This reply is substantially as follows :—First, so far as I know, there is not any *medicine*, which can be relied on to overcome this liability. So dreadful is the disease, so hard to be endured both by the patient and his friends, that I suppose men will never cease to try medicinal articles for this purpose. I would warn them to be careful in their experiments ; but I would certainly hope and pray that their efforts may ultimately be crowned with success. Secondly, there is a large proportion of cases, in which I suppose no *mode of treatment*, now known, will effect the desired object. I cannot find out any marks, by which these intractable cases may be distinguished with certainty. I will say, however, that the older the patient, and the longer time the disease has existed, the less will be the chance of recovery. Thirdly, I am happy to say that there are some epileptics, though not the larger portion of these unfortunate invalids, who may be relieved permanently by care in diet and regimen ; particularly by abstinence from animal food. I am happy that it is not the use of a powerful drug, which I urge upon my brethren for this dreadful disease ; but I will say that for a disease so distressing to

the patient and to his friends, a drug could scarcely be named, which I would not administer, if it could be done with a reasonable chance of success. It is perfectly consistent with this to add that the random employment of strong medicines, dreadful as the disease is, is entirely unjustifiable.

I have stated my belief that typhoid fever may sometimes be arrested at once within the first three days; or, if not arrested, that it may be shortened by treatment at that early period. After that, it may be regarded as a self-limited disease; and, for the most part, the physician is not called to the cure of the disease until after that period. Now I am inclined to say the same things in regard to pleurisy, pneumony, and the similar affections. At the very commencement of these diseases I believe that they may be diminished in violence, and in duration, sometimes perhaps may be arrested, jugulated, by blood-letting, aided by appropriate antiphlogistic remedies.

The value of blood-letting in the treatment of diseases, has been variously estimated in different ages and in different places. Within the lifetime of some of our brethren now living, this practice was carried to a great excess, by a very distinguished medical teacher in our own country.

I refer to Dr. Rush, whose influence during the latter part of the last century, and the earlier part of this, was greater and more extensive than that of any other physician in the United States. It was not in New England that his influence was thus great; but it was, I believe, in every State out of New England. Yet, here, blood-letting was resorted to in pleurisy and lung fever, if not in other inflammatory diseases. It has also been used in this vicinity in various affections of pregnant women, and with great benefit. My old master told me during my pupilage, that women bear bleeding during pregnancy much better than men, or than women in other circumstances. The justice of this statement was fully confirmed by my own experience in the early part of my life; for I gave up all obstetric practice when I had been in business eighteen years.

In this city, during the life of Dr. Rush, there was one practitioner, regarded by many as the most scientific man among us, who abstained from blood-letting entirely, or nearly so. This was Dr. Samuel Danforth, a man with a strong mind and a strong will, but wedded to a theory. It is singular that, while there was a great similarity in the doctrine of these two gentlemen, there was

none in their practice. Like the old *methodics*, and the late John Brown of Edinburgh, both of them regarded disease as differing from health in more or less of something. If health was thought to be maintained by a certain amount of tension in the living fibres of the body, then it was thought that disease consisted in more or less tension, more or less excitement, than appertained to health. This description is sufficient in a general view of the systems of these various medical philosophers. Some of them, Rush especially, regarded disease as a unit. But between Rush and Danforth there was this difference. Rush believed, that, in almost all instances, disease consisted in too much excitement. Danforth, on the contrary, maintained that it consisted almost always in too little. Hence, Rush almost constantly prescribed blood-letting, that he might diminish the amount of the most general stimulant, one which pervades, or at least has an influence on, every fibre of the body. In a very large proportion of febrile diseases there is experienced after bleeding some relief, for the moment at least, as to pain and distress. There may be, at the same time, a feeling of exhaustion, and not uncommonly syncope ensues. But then this is

treated as a temporary inconvenience, making ultimate relief more certain. Hence the sick were led to submit to this treatment, and to regard the evacuation as useful. The other gentleman, Dr. Danforth, looking at debility as the great source of disease, administered diffusible stimulants, with an idea that, if they do not give permanent strength, they bring on the normal actions, by which the strength may be renovated. He also looked ultimately to nutrition as furnishing the substantial means of restoration. With this view, he took care to relieve the alimentary canal from any undue burden, and from any offensive materials, which he supposed it might contain. When thus prepared, he believed that the patient might be brought back to a normal condition, sooner or later, by furnishing him with proper nutriment, and adding to it direct stimulants, by which all the organs, but the digestive organs especially, might be driven to the performance of their proper functions. At the same time, he paid great attention to some other hygienic laws, thereby favoring the influence of good diet. In a large proportion of chronic diseases, the patient derived, at least, temporary comfort from this treatment; and when pursued with judg-

ment, and where no organic disease embarrassed the case, he often obtained from it permanent relief. In acute diseases relief followed, in a greater or less degree, from the early evacuations of the alimentary canal, which he thought a necessary preparation for his other treatment. But the plan of supplying nutriment, and of using diffusible stimulants in acute diseases, sometimes occasioned much trouble and distress. However, Dr. Danforth was ordinarily too sagacious to press this treatment very strongly, when the patient's feelings forbade; then he waited and watched his chance. In this way he often succeeded.

While these two gentlemen pursued courses so opposite to each other, the majority of medical men in this vicinity, less wedded to system, adapted their treatment more carefully to the actual condition of their patients. This, at least, was their plan; they meant to do so. It must however be confessed that when I entered upon practice, polypharmacy was the crying sin among our medical men.

Recurring now to blood-letting, I will add, that, while Danforth and some others abstained from it entirely, those practitioners who were regarded as most judicious, employed the lancet in the com-

mencement of what they called inflammatory diseases. For local affections they directed local bleeding. None of them, however, bled so freely as Dr. Rush and his disciples did. At the present day, a change has come over us. I can hardly say just when it began. For the last twenty years, at least, venesection has almost gone out of use among us, in medical, if not in surgical practice. The use of leeches and cupping also has very much diminished ; so that I doubt whether there is a quarter part, and it may be that the number of leeches directed now is not more than a tenth part of the number directed thirty years ago. Now I rejoice that blood is not taken away, as a matter of routine, in every case of inflammatory disease, without regard to its period. I rejoice that our physicians do not direct blood-letting, because the pulse is thought to be unhealthy. It was on such false grounds that Rush was in the habit of prescribing this evacuation. The benefit derived from bleeding, to a reasonable extent, bears no proportion to the evils produced when this practice is carried to excess. Nevertheless, I feel persuaded, from my own observation and experience, that the use of the lancet should not be altogether abandoned. It is true, as to pleurisy,

and pneumony, which are the diseases, for which it has been considered most appropriate, that, when confined to one side, and where no other morbid affection exists at the same time, in an *adult* of a healthy constitution, these diseases rarely prove fatal. I cannot say the same with regard to young children. In them, simple and pure pleurisy will sometimes destroy life, and still oftener, pneumonitis will do this, and even severe and extensive bronchitis. But, in the adult, bleeding on the first or second day of the disease, or perhaps even on the third day, will somewhat shorten the disease, and will more certainly diminish its violence. In young subjects I am entirely convinced that the bleeding diminishes the risk of life. I am aware that I am repeating here some things which may be found in my tenth letter. I do it to show that I have not met with anything since that letter was written to alter my opinion. Let me here note, that with young children, it is not easy to take blood from the arm, because the veins are commonly hidden in the subcutaneous fat of children, particularly of very young children. But any one, who will take the trouble to study the mode of performing it, may effect his object in these subjects by opening the external

jugular vein, around which he will not find any impediment from adipose matter. At the present day as I have already said, bleeding is very much out of fashion amongst us ; and I am aware that it may excite some surprise that I, who mean to co-operate with my friends, Dr. Bigelow and Dr. Holmes, in discouraging the frequent use of violent remedies, and in trusting to the efforts of nature in very many cases, should give so much commendation to a mode of treatment generally regarded as the most violent, and therefore as the most objectionable. But, in the first place, these gentlemen do not decry active treatment on all occasions, nor do I know that either of them has actually proscribed blood-letting. I know, indeed, that they would oppose themselves to Sangrado if he were to reappear on the earth, and either of them would be capable of putting him out of countenance by ridicule, as well as of putting him down by sound argument. But though Sangrado and his follower, Rush, should be opposed by all sound minded men, it does not follow that this unfashionable practice can never be employed with advantage. Looking at it as a violent remedy, let me say, that powerful emetics and drastic cathartics, especially if fre-

quently repeated, may prove more permanently depressing and injurious to the constitution than one full blood-letting; that is, taking from an adult of ordinary vigor a pint of blood. In my opinion, as much as this, and sometimes more, should be taken at once. If the design is to give the remedy a fair trial, it is better to do at once all that is requisite. It is scarcely ever wise to repeat the evacuation. The practice of repeated small bleedings, averaging eight or ten ounces, which obtained, I believe, in former times on the continent of Europe, much more than in Great Britain, or in this country, I regard as very injurious. By this practice, the evils of blood-letting are produced without its benefits. For, usually, more blood is abstracted ultimately when this mode of treatment is adopted, while there is not a sufficient impression made at any one time to check the disease effectually.

I cannot refrain from referring again to what I have said as to bleeding in young children. On this point I ground my opinions entirely on my own experience. When I began practice, I was not disposed to employ bleeding in any cases, especially in those of children. But, finding that in them acute inflammations within the thorax

were often fatal, I felt myself bound to make a trial of this remedy, which had been approved by many men of sound minds. I then tried bleeding in subjects of all ages, and the opinions above given resulted from these trials.

Further, with regard to bleeding, we sometimes have inflammatory affections within the thorax, or elsewhere, which are epidemic and of a character differing from that of ordinary inflammation. In such epidemics, blood-letting is not so useful as in common inflammations; and often, indeed, it appears to be hurtful. The most remarkable epidemic of this sort, which I have ever witnessed, occurred in New England, in the years 1812, 13, and 14. This epidemic followed that of the spotted, or petechial fever. This affection of the thoracic viscera received various names, according to the theories adopted by those who applied them. It was called peri-pneumonia notha, typhoid pneumonia, bilious pneumonia, &c., &c. From *post-mortem* examinations, as well as from the symptoms during life, it was found that the inflammation was seated sometimes in the pleura, sometimes in the substance of the lungs, sometimes in the heart, on its inner, or its outward coat, or in two or more of these parts at the same time. Further, it was

found that the disease ran its course more rapidly, often much more rapidly, than common inflammation in the same parts. Likewise, from the commencement of the disease, in many of the cases, the prostration of strength was exceedingly great. The general belief among medical men was that patients under this epidemic disease could not bear blood-letting, as they might do in ordinary inflammations of the lungs, &c. The disease was vastly more fatal than those of the same name, in other seasons. So far as my limited experience permitted me to judge, for this epidemic prevailed much less in this city than in many other places within New England, a vigorous man might be bled within the first few hours of the disease, not only with safety but with advantage. But at the end of ten or twelve hours, the time for the remedy had passed by. A great majority of physicians who saw this epidemic, decried blood-letting altogether ; but I suspected that they did so without testing the remedy at the very onset of the disease. I was not alone in the opinion I have stated above.

Let it now be borne in mind that, in a large proportion of the occasions, on which I recommend the employment of the heroic medicines,

it must be on the first day, or at a very early period of the disease that is to be treated. If, according to the popular opinion, every disease has its remedy, by which it may be removed at any part of its career, the case would be vastly different ; but, if you have to do with a disease, the natural duration of which would be three, or four, or five weeks, and if your remedy were one, which would be effectual only when employed within the first two days of the disease, you would meet with success in a very small proportion of all the cases of that disease, which would come under your care. Ordinarily, a man who is attacked by an acute disease, which is destined to become very severe, is not aware of the evil which threatens him. Hence, he neglects to call for medical aid until he has lost the precious days or hours, in which relief may be obtained. The patient is unwilling to be sick. He loves to deceive himself, perhaps. Oftentimes, such a one will deny the existence of what we call the subjective symptoms of disease ; that is, of those symptoms, which the patient knows by his own sensations, and which cannot be discovered except by his statements. Likewise, when the first symptoms of a disease are not very severe, the cautious physician, one who is

unwilling to come to an unwelcome decision, will, as well as the patient, hope for the best, and let the same precious hours pass by, — often the only hours in which medicine can be employed with great advantage. When, from any cause, the opportunity for active treatment has been lost, the wise course is to pursue the expectant method. It is when it becomes evident to the physician, that the fever must run its course, as the popular phrase is, that the patient and his friends become anxious, and in some cases clamorous for active and powerful treatment. This is the time, at which the physician must take a decided stand. Hence it is, because he has not had an opportunity in the early days of the disease, or has neglected it, that the largest proportion of patients under acute diseases, whether severe or mild, must be treated on the expectant plan. Indeed, this is commonly more necessary in diseases, which are severe and attended by danger, than in those of a milder character. For instance, in a severe pneumonitis one cannot employ active remedies with safety after the second or third day, because it is then too late to arrest the disease; and though we might still lessen it by active remedies, there is the danger that we

may so impair the powers of the sick man that he cannot hold out through the whole course of his malady. But in a bronchitis, which is less dangerous than a pneumonitis, there is no such risk, and we need not therefore have the same fear of active remedies after the first days.

There is one inflammatory disease, not yet mentioned, in which it was formerly somewhat common to take blood, but in which it is very rarely, if ever done now. I refer to a general acute rheumatism, or rheumatic fever. In that disease there may, no doubt, be some temporary relief from bleeding, though even that is not certain; but, ultimately, the evil is much greater than the good. Such is the result of my experience. In acute rheumatism a patient is most commonly relieved spontaneously within a fortnight; so much relieved, that he thinks himself nearly well, and the inexperienced physician will think so too. This is one of the cases, where a confidence in a speedy recovery prevents the recovery from being speedy. For, after a respite of a week, more or less, a new attack of the disease takes place, and, as in the first instance, the disease shows itself in succession in various joints of the body, large or small; sometimes in the eyes,

there attacking their different tissues successively ; and not unfrequently it reaches the heart, affecting the external or the internal membranes of that organ, or, more rarely, its muscular substance. A third attack of the disease may follow, after this last one has subsided, and this may not be so rapid in its course ; instead of passing quickly from one articulation to another, it may become permanent in one or more of them for many weeks or months. Thus, if we regard rheumatism as an inflammation, it differs from other grave inflammations, in the early part of the disease especially, in that it does not remain long in any one part. Also, it differs because it does not terminate in suppuration, and so far as any material is thrown out upon the diseased tissues, the same will usually be removed spontaneously within a short time. But while individual parts recover, something remains in the system which causes successive attacks in different parts.

Now, though bleeding employed at the beginning may hasten the recovery in the elbow, knee, or other part which is first affected, the evacuation does not prevent the disease from showing itself in new parts. The question might be asked, by some Sangrado at least, if larger bleedings, or if

a frequent repetition of the bleeding would not be more successful. It would not be easy, I believe, for any one, except Sangrado himself, to try this method often. But, owing to accident, I knew of one instance where it was tried to a large extent. In this case, the part first affected was the tunica conjunctiva, and the inflammation was of extreme violence. The other tissues of the eye were affected in rapid succession. The patient was a vigorous young man, previously in good health. There was no reason at that moment to think of anything else than a common inflammation, common in kind, though not in degree. Of course, the eye seemed to be threatened with destruction. The most vigorous measures were called for; the more, as the sight of the other eye had been destroyed some years previously by a blow upon the organ. Seven pounds of blood were taken away within the first five days of the disease. Then, the true character of the disease was shown by a rheumatic attack on one of the knees, upon which the eye rapidly mended. From this period the disease pursued the usual course of acute rheumatism with great violence, and within a few weeks the eye took its turn twice more. The patient was not able to go abroad with any free-

dom for three months, and then with a painful and swollen ankle. So far as one case can go, this one shows that very copious bleeding in the early part of the disease does not arrest acute rheumatism, but rather makes it worse.*

Those, who hold the favorite opinion of the present day, that acute rheumatism has its origin in a morbid state of the blood, will readily explain the failure of relief from bleeding. But questions regarding the proximate cause of disease, I am not fond of discussing. For me, the experience gained from careful and honest observation, is more satisfactory than any the most plausible and most ingenious hypothesis.

Although bleeding is not to be recommended in acute rheumatism, it does not follow that the disease may not be relieved by any other treatment. So far as I know, there is not any other which can be recommended with entire confidence. Yet, in a good proportion of cases, if the treatment is begun at the very commencement of the disease, experience justifies some hope of advantage from it; that is, that there is a chance of diminishing the violence of the disease, and its

* See, in Appendix, the case of Mr. Prescott.

length. Various remedies are thought to do good, but that on which my experience leads me to rely is colchicum. Other active cathartics are found beneficial, but none so much so as this. To be effectual, it should be repeated once in four to six hours, until it brings on copious discharges; and if it occasion some vomiting, the chance of success is the better. Under its use, profuse perspiration will commonly occur, and the heat of the surface is diminished at the same time, while the pain is relieved without any extension of the disease to new parts. In consequence of all this, the patient often has a great sense of weakness and exhaustion; but if the use of the medicine is stopped, as soon as the powerful effects occur, he will usually be restored to some comfort within twenty-four hours. Under these circumstances, it will ordinarily be found that the disease has a lull, and if we can be assured that it would not return, no one would deny that the benefit would be an abundant compensation for the evil of the remedy. The object then is to prevent such a return. For this purpose it is necessary, in the first place, that the patient should remain on his bed, and be kept free from all disturbance of body and of mind. Secondly, his food should be of the mildest kind,

and moderate in quantity, for one or two days at least. After that, he may be allowed milk and bread, or some other equivalent vegetable article. Thirdly, sulphate of quinia should be administered with a view to prevent a recurrence of the disease. I will not say that this always succeeds, yet I have never perceived any inconvenience from the trial of it. It is not a new remedy in this case. It was recommended, I think, by Dr. George Fordyce, in the last century; but it was more distinctly recommended in the early part of this century by Dr. Haygarth, of Bath; or, to speak more correctly, the Peruvian bark was recommended by these distinguished physicians; for in their time the quinia was not known. That this medicine may have a fair chance, it should be exhibited at first in very full doses, as it is in intermittent fever. In the first twenty-four hours, sixteen or twenty grains of the sulphate should be given. The whole quantity for the day may be divided into four doses, the interval between the doses being four or five hours.

Most persons prefer to take this medicine in the form of pills, although some prefer a solution, in water. If the patient complain of dulness in hearing, or of unusual sounds, or of a sense of

tension in the ears, the dose should not be increased; otherwise, four grains may be added to the previous quantity on the second day. The dose may be increased again on the third day, if no inconvenience is experienced from it. Whenever any very decided inconvenience is produced, the quantity should be diminished, until the inconvenience has nearly disappeared. But it is best that the medicine should be continued in such quantity, as that the patient may be sensible of its effects for four or five days. After this, the dose may be gradually diminished for six or eight days, when the medicine may be given up. If, however, the disease should return in any considerable force, under the use of the medicine, this should be withdrawn. If then the disease appear nearly of the same force as during the first attack, the attempt to arrest it should be abandoned. But if it be evident that the disease is lessened in violence, the colchicum may be used again in such doses as to operate moderately, and on the subsidence of the rheumatic affection the use of the quinia should be resumed. During the use of the quinia, care should be taken to keep the bowels soluble, and the diet should remain moderate in quantity, and mild in quality. All animal food and stim-

ulating liquors should be withheld during this period.

If the treatment fail to be useful, or if the patient should not be brought under care within the first few days of the disease, he should be left free from active treatment ; in other words, the expectant course should be pursued. As the disease is often extremely painful and prevents sleep, opium may be employed as a solace. By many physicians, this is the only drug employed in acute rheumatism, and it is given in such quantities as to keep the patient free from severe pain. It has seemed to me, however, that, when this medicine is used constantly and freely, the evils are greater than the benefit. It does not shorten the period of the disease, though it lessen the sufferings that belong to it. But it lessens the appetite for food, it lessens very much, and often destroys, the power of digesting food, and it induces great constipation. Thence, in the end, it occasions much greater debility, more true exhaustion, than is produced by the operation of colchicum in the early period of the disease. The power of recovery seems to be lost. The patient may, at last, lie still in his bed without any distinct pain, but he cannot turn from side to side, he can scarcely raise his

hand, and often he becomes quite incapable of raising his head. You may offer him food under these circumstances, and stimulants with food, but he cannot take them with pleasure, and for a long while they will not be retained, or if retained, they will produce distress. True, it is not always so. There are people who can bear opium without these inconveniences, but they are the happy exceptions.

Various other remedies are recommended in acute rheumatism. Of late years both acids and alkalies have been employed. I cannot say that I have witnessed much benefit from these, or from any other medicines, with the exception of those I have already mentioned. In cases where the disease, though acute, has been local, and though severe, has not been attended by febrile, or constitutional affections, I have very commonly seen relief from the internal use of the resin of guaiacum. I think this should be given in a powder, and not in the form of tincture. One drachm may be taken at bed-time, and the same, or half the dose may be given in the morning, if the disease be severe. It should be given until it produces some active operation. In a bad case some colchicum may be added. If the disease do not

yield in three days, a blister should be drawn by cantharides as near as may be to the part affected.

In ordinary cases of *local* rheumatism, such active treatment causes more trouble than the relief is worth. Here, mild measures will suffice. Cover the diseased part with substantial new flannel, and two thicknesses of it, as soon as the pain is distinctly recognized. By so doing, in a large majority of cases, the pain will be overcome within twelve or twenty-four hours. The flannel should not, however, be removed in less than three days, and it is well then to remove only half of it at a time. If one means to follow this direction, let him attend to every word of it.

There is a disease which has been called, though it is not the only disease which has been so called, the *opprobrium medici*; I mean the gout. It has been said that the doctor could not remove it. Now, if this be said in respect to a fit of the gout, it is no longer true. The remedy is colchicum. I should be supported by a very large proportion of the medical men, who have tried this drug at the commencement of a fit of the gout, in saying that it can give relief. No doubt, it may

sometimes fail; but it is most rare for it to do so, when properly employed. The dose requisite is different with different men, and in a new case, the medicine must be tried for awhile to ascertain this dose. When it is ascertained, let the medicine be employed as soon as the attack is fairly recognized, and let it be repeated once in six or eight hours, until the pain has fairly given way, or nausea is produced. The experienced patient does not often require a second dose, and very rarely a third dose. I have been told by gouty patients, and by their physicians, that they have tried this remedy without success, and perhaps they have thought that injury has been produced by it, but a fair and careful trial has at once brought about a change of opinion. In England, where this aristocratic disease prevails much more than with us, I believe that almost all physicians of experience agree in testifying to the efficacy of colchicum in gout. By many it is thought a specific.

I have spoken of the treatment of the paroxysm of the gout, but it is much more important to prevent the recurrence of the paroxysm. This is attended with difficulty, and I fear there is not any method, by which we can with certainty

effect this object. This, we are told, is the disease of high livers. This is not said without some foundation, but it does not require great excess to produce it. You do not meet with it, or very rarely, among men who work with their hands ; not among common laborers, nor among mechanics. You do not commonly find it among men who use spirituous liquors without wine, whether they use them in moderation, or in excess. You find it among men who drink wine, or other fermented liquors. I mention the fermented liquors because in one instance, at least, I have seen it in a gentleman who had not used wine habitually, but had used cider freely. But the occurrence of gout is not any evidence that the subject of it has used wine to excess. This malady is much more common in Great Britain and Ireland than in this country. I was ready to say, that it occurs among men distinguished above their fellows. I may say, at least, that among men much distinguished it is extremely common. You find this in reading the biographies of bishops and priests, of judges and counsellors-at-law, and of eminent physicians ; likewise, and perhaps I should say, more particularly, amongst distinguished statesmen. I have Englishmen in my mind while I make these state-

ments. Among them I believe it is not rare to find soldiers and sailors subject to gout ; not those in the ranks, and not the mariners, but the major-generals and the admirals. But it is by no means so common in these two classes, as among the great men in civil life. You see, then, that this disease occurs among men who use their minds on important subjects, among those eminent in their respective branches, whose mental labors are often excessive, and especially if these labors are attended by great responsibilities, and give rise to great anxiety. The influence of wine in producing this disease has been much dwelt upon, and very properly.

I have said, that it comes to those who do not use wine to excess ; and I have an impression, though I am not sure about it, that it rarely, if ever, occurs among those, who are in habits of intoxication from wine. Under this view of the matter, one's first thought would be to advise the subject of gout to abstain from wine altogether. The only ground of hesitation on this point is, that there may be something in the constitution, or circumstances of the patient, which would make one fear to withhold this accustomed stimulus. But can abstinence in this respect be relied on with entire

confidence to prevent the recurrence of the disease? It cannot. Ordinarily, decided benefit will ensue from this abstinence; but not always. The subjects of gout are, very many of them, persons of sedentary habits. But, also, this disease is hereditary, and hence comes upon men, who are very active. The son suffers, I will not say for the sins, but for the unhealthy habits of his father. Hence you find families subject to it. I once knew a gentleman, finely made, tall and stout, of excellent habits, but who belonged to a gouty family. He began to have the disease very early in life. He was a man of firm mind, of great resolution, and he determined to avoid such sufferings, as he had seen among his family and friends. With this view, he avoided fermented and distilled liquors entirely. He abstained from animal food, and he led an active life. He persisted in this course for a series of years, more than twenty years, I believe; perhaps thirty. Probably, he did better than if he had not been thus abstinent as to diet, and thus active in his habits. Nevertheless, he suffered severely from the gout, and he did not reach the period of old age. I state this case only to show that the disease is not maintained merely by the use of wine. I should,

however, advise abstinence from this liquor in every case where there were no obvious objections ; but I should advise other things also. The first in importance among these other things is exercise in the open air, active and habitual exercise, without over-caution as to the weather. Next, I should advise moderation and regularity as to food. In certain cases, probably, vegetable food with milk would be the most beneficial diet. In all cases the regular excretions should be promoted. Not merely the alvine excretions, but also those from the kidneys, the skin, and the lungs. Regularity as to sleep also should be enjoined. But this sleep should be in the night, and should be begun in such good season as to permit early rising. Something gratefully stimulating should be permitted to one, who abjures the indulgences of the table. Now there is one stimulant, which is not commonly enjoyed among men in elevated stations, although it seems to be at the command of all mankind ; I refer to the morning air. I should insist that a man who seeks to gain the vigor by which he can resist disease, should get the benefit of air and exercise daily, before he has yet engaged in any close application of his mind to business. To all this I would add, what perhaps it

is impossible for some men to regard, that is, avoid over-work and avoid anxiety. But how can the statesman, how even can the man engaged on the bench, or at the bar in a court of justice, and I may say, perhaps, how can a physician engaged in extensive practice in a large city, how can any of these limit his labors at all times and avoid the anxieties, which seem almost inevitably to attach themselves to great trusts? Undoubtedly, for many men, this is impossible. The soldier takes the risk of life. Other men must occasionally do the same. Much depends on one's temperament and constitution and early training. But with firmness and discretion, something can be done.

The soldier, who exposes his life in battle, may feel that it is quite as proper to put his health and his life at risk under the continued labors, and the heavy anxieties which appertain to his position. Let it be so. Temporarily he may perform his duty, and disregard the hazards; but it rarely happens that the soldier is called to pass his whole life, or many years in succession, under these unfavorable circumstances. Wars do not commonly continue for many successive years. For a statesman the difficulty is much greater. William Pitt,

living in a turbulent age, not having a hundred eyes, could hardly find time enough to watch over the events of the world, the great events, each one of which it was necessary for him to know and to estimate correctly, and at the same time to make such arrangements as to obtain the best results from the favorable events, and to guard against the evils threatened by those of an opposite character, — William Pitt, I say, striving to control the affairs of the world amidst storms and tempests, could not turn away from his official engagements, or his public duties, and pay attention to his own health. This is very true. But very few men have lived in the world, who for a series of years have been situated as Pitt was. He was not an emperor; not an autocrat; he was the servant of his king, responsible to him and to the great nation under him. Napoleon, with all his mighty labors, did not act under any master, was not forced to consult any peers, any fellows, but thought and acted for himself as a man does in his private affairs. Perhaps to Pitt the trial of his constitution was harder than that of Napoleon. But both of them were bound to incur all risks of personal evils, while in the service of their country. They might well dis-

regard the advice of a physician. But they are exceptions.

Let us leave this fine discussion and remember that, if one would avoid a fit of the gout, he must endeavor to lead a calm life, and rather give up the pleasures of society, than to incur the evils resulting from its indulgencies, its cares and anxieties.

It has been shown that in some acute diseases from the beginning, and in others after the earliest days, we must abstain from heroic remedies. But it must not be understood that in pursuing the expectant course, we necessarily avoid the use of all medicines ; still less, that we leave the patient without any directions as to the treatment in other respects. By leaving a case to nature, it is not meant, that we must leave it to chance. There are many points, on which directions may be necessary. Accidental aggravations may require to be removed, or relieved ; and, for this reason, medicine may be called for. But mostly what is called the hygienic treatment must be cared for. Here, it may be asked, do we mean by the hygienic treatment anything but good nursing? It may be said in reply, that this treatment is, in good part, that which it is the business of the nurse to look

after ; just as it is the business of the apothecary to put up the medicines which are ordered. But, in both cases, it is the business of the physician to prescribe what is to be done. He must not only point out the general principles, on which the treatment is to be founded, but should show in each case how these principles are to be applied, and should descend to particulars so far as each case may require. Let me specify a few of the points to be regarded as such, when the treatment is conducted on the expectant, as when on the active plan. Where shall the patient be ? Shall he go abroad, or stay in the house ? Shall he sit up, or lie on the bed ? What shall be the temperature of his room, and how shall ventilation be managed ? What nourishment shall he have, and how often may it be given, and in what quantities ? Although we abstain from the use of strong medicines to produce, or to check evacuation, yet by mild remedies or by the dietetic treatment we may favor, or we may restrain them. On these points, and on many others analogous to them, the admirable Miss Nightingale gives us many excellent directions. She professes to be instructing the nurses. She tells them in what way they should manage as to the points referred to. But I believe

that Miss Nightingale would, in reality, look to the physicians, for the care of these things. She is too modest, or too polite to offer her advice directly to the doctors. But she may be said to talk to the nurses within their hearing, and as I presume, with the hope that they will take the hints which she throws out: Until she has established a school for nurses, she will hardly be willing to entrust them with the regulation of these important points. I will acknowledge that she may find too many instances, in which the doctors fail to give proper directions on hygienic points; but if she were to speak her mind, she would say to them that this was their business. It is nevertheless true that the physician should not always be peremptory in his orders; he may allow to the nurses some latitude. As far as possible he should consult the taste and feelings of his patient. For one, who is suffering under disease, that should be done, which is most agreeable, so far as it is consistent with safety. I know that it is too common for those about the sick to hesitate as to an indulgence of the feelings and taste of a sick man; they rather presume that such indulgence would lead to injury. On the other hand, I have long been persuaded that the taste and

inc~~i~~ndination of the patient should be indulged, unless there should appear some obvious and decided objection. The burden of proof, that indulgence would be wrong, must be thrown on those, who raise the objection. But it is by the physician, and not by the patient, that the final decision should be made; as on the physician the responsibility should rest.

I avail myself of this opportunity to make a few remarks on the diet of the sick. By one class of people, those in and those out of the medical profession, the fear is that the sick man will be allowed too much to eat and drink, or such as he cannot digest, or such as from its quantity will aggravate his disease. By another class it is feared that he will not be supplied with food sufficiently nutritious, or will be too much limited in quantity. Now, I take it, that in an acute disease, at the commencement of it, the stimulus of food may increase the disease; so that from the first to the sixth or eighth day, according to the character of the disease, it is best that the food be small in quantity, mostly liquid in form, and mild in quality. Besides, at this period, the stomach will not act well on solid food, while, if the food be liquid, it may be passed through the canal with comparative

ease. But, after the early period, the case is to be regarded in a new light. Then food should not be withheld from the fear of aggravating the disease by its stimulating property; though it should be, if appetite is entirely wanting; and that only should be furnished which is agreeable to the taste. Under these conditions, it may be given, but with caution; for the stomach will not always digest food, even when the patient craves it, and when it proves grateful to his taste. At first then it should be given in small quantities once, or at most twice in a day. In proportion as the patient bears it well, the quantity may be slowly increased; and so may the frequency of the meals. If the food be solid, it should never be given oftener than once in four hours; and then not in the night hours, unless the quantity is very limited. Under similar circumstances, when fermented and spirituous liquors are craved, they may be given, such as are most grateful; at first in small quantities. The extent, to which these liquors may be used with advantage, is very various; the limits depend partly on the previous habits of the patient in the use of them. There are instances, now and then, in which good wine is not only borne well by a convalescent, but in

which it seems essential;—in which he is so evidently benefitted by it, that he may be allowed a bottle, and even more than that, in the twenty-four hours, for many days in succession. In this I have reference to good Sherry, Madeira or Port wine. But it is not wise to lead the patient to such large potations, unless he is obviously more comfortable for the indulgence. It is not merely those who are accustomed to drinking wine, who can bear this free use of it. I have in a few instances seen teething children, much wasted and much exhausted by *cholera infantum*, take wine to the amount of a pint a day for many successive days, with unquestionable benefit.

I have not exhausted my subject. Far from it. There are many more medicinal drugs, too good to be expunged from the list of the *materia medica*, which I might mention. Among the more powerful of these are Elaterium, Digitalis, Diluted Hydrocyanic Acid and Iodine; to which I may add Sulphuric Ether taken by inhalation. All of these may be occasionally employed by discreet men; men who are willing to study the mode of using them, the effects to be expected from them, and the extent to which they may be given. Among milder drugs may be mentioned the Spirit

of Nitric Ether, the compound Spirit of Ether, the Solution of Acetate of Ammonia, Valerian, and Assafetida, as old friends, whom I would not like to part with. The same may be said of Mustard, the Water of Ammonia, Croton Oil, Chloroform and Cantharides, for external use. Nor should water, pure or medicated, cold or hot, employed as a partial, or general bath, be omitted in the list of remedies not to be dispensed with. Many other articles, without great pretensions, are often administered to the great satisfaction of the sick.

I may also bring to view other morbid affections, besides those mentioned in this letter, or in the series of letters formerly addressed to you, from which the subjects of them may be relieved wholly, or in part, by the proper administration of articles contained in our apothecaries' shops. For instance, there is the whole tribe of cutaneous diseases, for which the Specialists would show you that much benefit may be afforded by remedies, some of them external, some internal. If, now and then, it be true that those, who offer instruction in regard to diseases of this tribe, are too confident in pointing out the remote causes of these diseases, or in the means directed for the cure of them, — it is certainly true that, in many instances, the evidence of

the benefit produced is more obvious, than in most diseases of other descriptions. This success is easily explained, when we consider that the diseased parts are exposed to examination much more perfectly, than the internal parts of the body. Hence the diagnosis is comparatively easy, and the diagnosis of the *different stages* of a disease, — a circumstance which it is always very important in regard to the treatment, — may be much more certainly ascertained than in other diseases. So likewise the effect of remedies can be more satisfactorily demonstrated, in treating diseases of the skin, than in treating those of the internal organs.

Remarks, somewhat the same, may be made in respect to the treatment, of other local diseases, called at the present day *Specialities*, such as diseases of the eyes and of the ears.

I am aware that it is objected to the Specialists that they are apt to make greater pretensions to skill, than are justified by the result of their treatment. No doubt this sometimes happens. This happens partly because they are honestly deceived, as men are always liable to be, when their attention is confined to a very limited sphere. But, it must be confessed that it sometimes happens from less

credible causes. A man with a good address, a due share of low cunning, or a due share of bold impudence, does not find it difficult to deceive persons suffering under disease. Yet, from all that I have learned from the Specialists, I have been led to the conclusion that they can show us many cases, in which medicine can be employed with unequivocal benefit.

To what conclusions have we arrived? First. I have admitted the abuses of medicine. It is, though much less than formerly, given too much as a matter of course to all, who apply to the physician for aid; and powerful drugs are administered too often, without bearing in mind that they will certainly do some harm. This certain evil should be compared with the uncertain benefit, which we are justified in expecting from them. It becomes every medical man to keep these considerations fairly before his mind, when making his prescriptions. I have flattered myself that we are not peculiarly subject to reproach on this head, in this region of the civilized world. But I know how readily all men take to their hearts such sweet flatteries as this.

Secondly. I have endeavored to point out the importance of resorting to what I have called the

hygienic treatment, in all cases admitting the use of it. This I have recommended especially in chronic diseases, maintaining that, in very many cases, the best chance for relief may be found in the promotion of the general vigor. By this the system may be enabled to overcome the disease ; or, where this cannot be done, to delay as long as possible its fatal termination.

Thirdly. I have expressed my conviction that by medical treatment, often by the efficient use of powerful drugs, sometimes by blood-letting, we may frequently succeed in diminishing the violence, in lessening the suffering, and in shortening the duration of diseases. But I have distinctly stated, and as forcibly as I could, that it was only at the commencement of a disease that the treatment, above described, could be employed with any just hope of success. In doing this, I hope that I have been clearly understood as referring to the first days of the actual disease, not to the first days of the physician's attendance on it.

Fourthly. I have brought into view the self-limited diseases, of which Dr. Bigelow has treated, in which certain processes must be gone through, and which medicine cannot arrest. I have stated,

however, that we can sometimes diminish the sufferings, and perhaps also the danger attending these diseases, when these are passing beyond certain boundaries. Otherwise, these diseases are to be left to their own course, only guarding against such things as would aggravate, or prolong them.

Fifthly. When diseases are brought under the treatment of a physician, after the period during which active measures are found useful, or when such treatment has done all that it is capable of, the expectant mode of cure should be relied upon.

To show the claims of medicine to the character of a useful art, I have given an account of the uses, which may be made of some of the most powerful drugs employed among us at the present day. Subsequently, I pointed out some of the most common diseases, in which I have thought medicinal drugs, as well as other treatment, may be used with benefit. I have given the results at which my own mind has arrived. I have not pretended to demonstrate the justness of my conclusions. Nor have I brought forward any system of medical science. I am not capable of so doing. I think I may say more ; — viz: that our knowl-

edge at the present day does not justify the **attempt** to bring forward any such system. I do **not** deny that we have much valuable knowledge **in** the various branches of medicine. I maintain **the** contrary opinion. But, as I stated in the first part of this letter, our acquaintance with physiology and pathology is limited and imperfect; and these are the fundamental branches. Of course the same must be true in regard to therapeutics. We do not know enough, as to either of these branches, to enable any one to offer a satisfactory *system of rational medicine*. In many instances, certainly, our practice is founded on experience alone. In the good sense of the word, our practice is *empirical*. Happily this is often sufficient. If we know that cinchona will arrest an intermittent fever, have we not good cause to be satisfied, although we cannot answer all the questions, which may be put, in regard to the etiology and the pathology of that disease, or in regard to the *modus operandi* of the cinchona.

There is one acknowledgment, which has, I think, been implied in what I have already written; but I choose to make it in distinct terms. This is, that in very many instances, in which the

aid of a physician is invoked, it is certain that he cannot remove the disease. In some instances this is because he is called too late; unhappily in very many it is because the disease will very rarely, perhaps never, yield to medical skill. Yet, even in these forlorn cases, the art of medicine is not useless. On many points there is a choice as to the course to be pursued. Life may be prolonged by wise care, however hopeless the case. What is more important, by art the sufferings may be mitigated, and the patient be comforted, though the disease cannot be arrested. To many persons, who know they have a disease, which is without a remedy, it affords much consolation to have one to watch over them, who understands their sufferings, and who is daily studying to soothe them. The faithful care of nurses, and the kind sympathy of friends, are often still more important; but, in some sad cases, all are not too much to uphold the strength, or to soften the anguish of a beloved one in the last days and hours of life.

In conclusion, may I hope that you will agree with me that there does exist much valuable knowledge in regard to the treatment of the sick. Let us not throw this aside, because it is imper-

fect; because it will not satisfy those, who are critically scientific in their requirements. There are results of personal experience, of which each medical man, or, at least, many medical men can furnish a part; there is much of this sort which has been accumulating through ages. What I have stated in respect to diseases and their treatment, is grounded on this sort of experience. It would be too absurd were I to pretend that I have gathered, or discovered, all which I have stated. With me, as with my brethren, most of what I know has been derived from others. But then I have also been told by others much, which I have not found to be true. In general terms I may say that the statements, I have made, have been confirmed by my own observation, or experience. I have not offered proofs; I offer only opinions. I claim to have formed these opinions after much and careful observation. I claim to have been diligent and careful; but there is no doubt that I have made mistakes, and I will thank any one, who will point them out to me. I never suspected that I was possessed of any extraordinary powers, or talents. But I do claim an honest devotion to the pursuits of my calling, and a sincere love of truth. I like to compare myself to an old gar-

dener, who has sedulously devoted himself to raising the flowers and the fruits, and still more the kitchen vegetables of the plat of ground under his charge; who has listened to the suggestions of the scientific, and has been willing to follow them in making his experiments, exercising due caution when those experiments appeared to be attended with risk of evil, or likely to involve too much expense; and who, at last, points out to those engaged in the same pursuit the best opinions and practices he has been able to arrive at.

THE END.

NOTES.

NOTES.

I TRUST that the following papers will be found interesting on account of the subjects of them. With the exception of the article in respect to Washington, they all have reference to the preceding letter ; but I have thought it best to leave them to be read after the letter, and therefore did not place on its pages any notice of them.

In the letter, I have frequently mentioned the hygienic treatment of the sick. By that I meant a treatment as to diet, regimen, &c., founded on the principles of that branch of medical science called hygiene. By this mode of treatment we often aid the spontaneous efforts of nature in overcoming disease. The two first notes are given partly to show that I have always paid great regard to the hygienic treatment. I have not become tired of administering medicine ; I am not incredulous as to its utility, although I do not use it so freely as I did in my early years.

The first note contains an account of the first important case, which came under my care, and it will be seen that I then paid great regard to the treatment just mentioned. I would not however have given this case for that purpose only. My fellow citizens in Boston will see other reasons for publishing it.

The second note is given to show that, when I had been in practice forty-six years, I continued to hold the same regard for the hygienic treatment. It is copied from the British and Foreign Medical Review, No. XLIII. published in July, 1846. In the number of that Review for January, 1846, the Editor, Sir John (then Dr. John) Forbes, had published his celebrated article on the subject of Homœopathy. I had previously had some correspondence with Dr. Forbes, and immediately after reading that article I wrote to him expressing the great satisfaction it had given me. My letter was not designed for publication, as he saw ; but he replied to it at once and asked my consent to his printing some extracts from it in his Journal. This explains the appearance, in that excellent periodical, of the paragraph, which makes up the second note given in these pages.

The third note contains some remarks on the

care necessary in getting reports regarding patients under treatment, and on nurses. These remarks I wished to offer for their own sake; but I confess that my main object was to bring into view the character of one, whom I have long considered a model nurse.

The fourth note contains an account of the ailments and death of the late William H. Prescott, Esq., the celebrated historian. It is his case, which was referred to in the preceding letter, as an instance of acute rheumatism treated at its commencement by very copious blood-letting.

Soon after Mr. Prescott's decease my friend George Ticknor, Esq., requested me to furnish him with a medical account of Mr. P.'s case. Mr. Ticknor wanted this to aid him in preparing a biography of our lamented friend. I gave to him my statement in the form of a letter, which is copied below. I found that Mr. Ticknor's work would not be published for some time, and as I wished to bring Mr. Prescott's case before my professional readers, I begged the favor of him to allow me to use it in this way. He very kindly consented to my wish, with the proviso that he should still use the whole, or any part of my letter, as he should think proper.

There is a fifth article which is not a note to the letter. It is a distinct affair. It contains an account of the last sickness and death of General Washington. This was written by me about a year ago, at the request of the Hon. Edward Everett, to be used by him in his *Life of Washington*. It is referred to by Mr. E. in that work, and is printed in an appendix to it. Copies of it have been sent by me to various friends, in a pamphlet form. These were printed for me in a larger type than in the *Memoir*, expressly for private use, by Mr. Everett.

For this unexpected favor I could not but feel very grateful to my respected and learned friend ; but, as often happens, emboldened by one favor I asked for another. After I had obtained Mr. Ticknor's leave to make use of my letter to him, it occurred to me to ask Mr. Everett's permission to add to this volume the paper on Washington's case. I could not say that it had any reference to my new letter to a young physician ; but I thought that it might reach some medical men, who would not otherwise see it. The subject is one, in which I have a right to suppose that every man, but especially every medical man, must feel a strong interest.

NOTE I.

I am induced to give the history of the case which follows from several considerations. It was and is interesting to me on personal accounts; it was the first important case which came under my care when I entered on the duties of my profession, and it relates to one whose memory will always be held in regard in our city. I will add that it is one of the instances, of which I have since seen very many, which teach us not to despair, although the appearances of danger may seem very great. We meet with some diseases, which scarcely permit any hope, such as tubercles, malignant diseases of various sorts, hydrophobia, tetanus, &c. In such cases, the best encouragement may be founded on a hope that we have erred in our diagnosis. But, when dealing with diseases, which are not so uniformly fatal, it will be found that more than three out of four of the instances of sickness, which are regarded by the friends of the patient as very dangerous, ultimately terminate in recovery. Hence in bad cases, we

are justified in being hopeful ; and it is right for the physician to encourage hope in the patient and his friends. He need not deny that there is danger, but he is justified in looking at the bright side, and it gives to the patient a better chance of recovery. I know that some of my brethren are fearful of pursuing this course, as it may subject them to censure, if the result is unfavorable ; whereas, if the patient recovers after he has been despaired of, he and his friends are repaid for all their anxiety. But there is no fear that recovery from a severe sickness will not bring pleasure enough to the parties concerned, and I regard it as the duty of the physician to run a little risk of reproach now and then, rather than keep the parties more anxious than they need to be for several successive weeks, or days, or even hours.

One reason for writing this note is that the treatment was, in very great part, conducted on hygienic principles. I wish to show that my regard for these principles has not arisen in my old age, from a distrust of the benefits of medicinal treatment ; but that I began life with feelings of great confidence in them. That confidence has never left me, while experience has made those principles more fully and more distinctly known to me.

I went to London in October, 1799, to pursue professional studies there. I returned home, and commenced the practice of medicine about the first of October, 1800. When I went away my father had one grandchild only, a boy about five months old, then bright and healthy, though small. He was, of course, an object of great interest in my father's family. On my return home, I found him wofully altered. His appearance shocked me. He was very pale, much emaciated and exhausted. His skin was flabby, and seemed to hang in folds around his bones. His appetite was capricious, his food was very imperfectly digested, not always retained in his stomach, and did not nourish him. His dejections were frequent, loose, changing in character from hour to hour, made up of undigested food, of mucus and watery fluid, varying in color, mostly green, and never healthy in consistence, color, or odor. His bright blue eyes had not lost all their spirit, but otherwise his countenance exhibited marks of great wretchedness. By turns he was languid and fretful. His nights were wakeful, and the sleep he got was uneasy and unrefreshing. It was a bad case of *cholera infantum*. Such was his appearance, that, dear as he was to

me, the son of a sister near my own age, and my earliest playfellow, I felt, on first looking at him, as if it would be a happiness to see him die. The case seemed to be desperate. I had acquired some familiarity with the subjects of the disease during my pupilage, before I went abroad, and I thought I had never seen one so sick as he was, who recovered. Thus, at the first, I was in despair. But, on the second day, when I had reviewed the case, my feelings changed. I began to have hope, and happily my hopes became stronger from day to day, or at least, from week to week, and in a month or less, I regarded his ultimate recovery as almost certain. When I entered on a consideration of the case, with a view to treatment, I put on paper the opinions I had adopted as to the actual pathological state of the patient, the changes which I should strive to produce by the treatment, and the means best adapted to bring about these changes. From the relation of the patient to myself, my strong interest in him, and the great responsibility I felt to the parents, who ventured to intrust their only child to the care of a stripling like myself, the circumstances have remained in my mind to this period, more than sixty years, since they occurred. I shall not, however,

give all the details of the case, though I shall relate so much as to make it intelligible.

I must go back to show how this child had been brought to the dismal state, in which I found him. He was small at his birth, which was premature by more than two months. Under the care of an experienced nurse, he got on very well during the summer and autumn of 1799. Unhappily, his mother's strength and health failed her, so that he was weaned in the spring of 1800. From that time till the next October, when I saw him, he was at the height of his teething. During this period, he should have been fed partly, if not wholly, on the human milk. *Cholera infantum* was brought about, and became severe from the dentition, the dogday-weather, and the unpropitious diet.

I will not here go into an explanation of the pathological state in *Cholera infantum*, which I have endeavored to describe in the ninth of these letters. At the time, when I took charge of this child, I had not as definite opinions on the subject as I acquired subsequently. I then, however, saw, how all the evils were aggravated by the foul and acrid contents of the alimentary canal, and from time to time procured relief by a small dose

of calomel, sometimes, though rarely, followed by castor oil, or some like article. I believe that distinct relief, for the time at least, followed every dose of calomel. But, from the first, my great object was to prevent the recurrence of this foul state of the canal, by limiting the quantity of food and drink, and by administering such as could be best digested, or such as, if not digested, would be the least likely to cause morbid irritation by becoming acid, or acrid. I directed a bath, pleasantly tepid, at night, to soothe the whole system, to equalize the temperature, and thus to promote sleep. In the morning, the cold sponge bath, to which the child had been accustomed from his birth, and which seemed grateful to him, was continued. He was too feeble to walk, but he was carried abroad every day, when the weather was not positively foul. He enjoyed this excursion, and it was continued through the winter, as the best thing next to food, to restore his health.

His food was boiled milk, to which was added lime water, when the dejections were loose and frequent, the cold water cracker soaked in water, when he wished it, and tender beef or mutton, broiled or roasted, twice a day if he liked them, with poultry occasionally, by way of variety ; for

regard was had to his taste, so far as consistent with the principles, on which his food was selected. These principles were to avoid acid and acescent articles, and, as far as could be, consistently with his taste, to avoid food in a liquid form. I doubt not that some tonics and cordials, such as wine, were administered with this food ; but my memory does not serve me on that point. It is the attention I gave, when commencing practice, to hygienic principles, which it is my special object to state. I may say that, from that day to this, I have studied those principles, and endeavored to guide my patients by them. I will remark that this is not always easy. With some patients there are prejudices to be overcome ; some are not willing to submit to the self-denial as to various indulgences, especially as to the quantity and quality of food ; and some are unwilling to make the efforts required. In the case I have related, I had friends willing to pursue the treatment I directed in the most thorough manner.

I have said that, when I first looked on my nephew under his disease, he seemed so exhausted, and so wretchedly feeble, that I felt as if he could never live to have comfortable health, and that he could never become useful to himself or others.

A fortnight later, when he had become convalescent, I ventured to give an encouraging prognosis. Some wise old people thought me wrong, and one of them, who felt a very strong interest in my professional success, very kindly took me aside to give me some cautions. He told me that he had heard of the hopes I had given to the friends in regard to this child, and that I had done likewise in respect to a young lady of his acquaintance. "Now," said he, "everybody says that both of them will die, and if you are so bold in your opinions, your reputation will be injured." My reply probably was, such as I have often made since, if I did not then;—that I thought it no more than fair to impart to the friends the hopes which I felt authorized to entertain myself. Surely I would not promise a recovery in a doubtful case, but I would not allow loving friends to suffer more than was needful. Happily, the young lady above referred to recovered, and is now living, having given and received much pleasure during the sixty years which have since passed away. My little nephew also recovered, and, at the end of two or three years, he became tolerably vigorous. Ultimately he became a tall and healthy man.

It is not for us to judge what a miserable sickly infant may become, if he can be carried over a few weeks. This feeble boy was John Lowell, the founder of the Lowell lectures. He lived to be father of two children, both of whom died within three weeks of each other of scarlet fever, which prevailed at the time under one of its most pestilential forms. Their mother had gone before them. Mr. Lowell was then left, a little more than thirty years of age, a widower and childless. At the end of two years he followed an inclination he had felt in early life, and engaged in travels in foreign countries. After a visit in Europe, where he had been once before, he went to Egypt, and there passed some time, during which he contracted a disease of the climate. He did not give up his projects, but, passing over the desert, went to the Gulf of Persia, and thence to Bombay. He reached that place in miserable health, and within a few weeks his life was terminated, in the thirty-seventh year of his age.

Mr. Lowell died possessed of a large fortune. One half of this property he gave by his will to establish the Lowell Institute. The custom of having popular lectures had begun not long before his departure from his native shores. He saw

that much good might be done by such lectures, if conducted discreetly on a liberal plan, such as would bring forward men of the best talents. It was principally for such lectures, and entirely for giving popular instruction, that this Institute was established. The inhabitants of Boston well know how much pleasure and profit have been derived directly from these Lowell Lectures for the last twenty years, and as yet we may say they have only made a beginning. We may hope that this blessing to our community may continue for many ages. But this is not all. One good thing leads to another. Distinguished men have been brought from Europe to give courses of lectures in this Institute. It is in this way Mr. Agassiz was induced to visit our country. How much this most distinguished naturalist has already done, and how much directly or indirectly he will do for us, I will not undertake to tell. If our wealthy men do not become less mindful of the interests of science than they have hitherto been, our University at Cambridge may have a School for Comparative Zoology such as the world has hitherto never possessed.

NOTE II.

“ — (America), January 30th, 1846.

“I THANK you much for having written the article. The fulness of time has come in which all this matter should be exposed fully and clearly. You have not said a thing, which I have not thought of and agreed to beforehand. I know how presumptuous this may seem ; but you know that it is one thing to entertain correct thoughts on a subject, and quite another thing to bring them out clearly and in proper order, so as to claim the assent of all good judges. This last is what you have done most satisfactorily.

“Some of the opinions you have expressed I have entertained for many long years ; others I have arrived at more lately. I first longed for a good natural history of diseases, to decide how far remedies had an effect. As connected with this I early learned the primary importance of diagnosis, and this in reference to the different stages of diseases, as well as in reference to diseases them-

[111]

selves. It is many years since I was satisfied, in respect to acute diseases, that it was only on the first days (principally the first three days) that medicine (drugs) could be of much service. At this period I am still satisfied that acute diseases can, ordinarily, be much mitigated and somewhat shortened. But an exception must be made in regard to such as we call malignant (yellow fever, Asiatic cholera); and, as to shortening, in reference to the exanthemata. I have been getting more and more of the opinion, that in most chronic diseases, diet and regimen will often have a great influence,—drugs rarely have any, very decisive good effect, and often an injurious effect only. I have long deprecated the idea (and this I have done in communication with my intelligent patients) that medicines (drugs) are necessary in the treatment of all diseases. I have urged that it was the business of the physician to take care of the sick, pointing out that *cure* and *care* were the same word originally,—and that in taking care, it was much more important that he should endeavor to control the influence of the common agents, than that of the occasional ones, called medicines;—that he should attend to the non-naturals,—those things which nature does not

decide, but leaves to our choice, — that he, the physician, should do it, and not leave it to the nurse or the grandmother. In consonance with these views, I have been unwilling to say that my patients, who recovered, were cured by me ; for I endeavored to cure all of them, and claimed to have done it, even when they died. In our hospital, opened twenty odd years ago, I would not allow the record books to say that so many patients had been cured, as is a common practice ; but that so many were discharged well, so many improved in health, &c. I have often urged upon my brethren that we should never get the better of quackery, so long as we attributed the recovery of our patients to medicine, on the *propter hoc* principle, — that is, *propter hoc* because *post hoc*. Our proper ground is, that, having studied the subject and had personal experience, we know better than others how to direct the cure of the sick ; and that in doing so we may use drugs, or may not, as the case may require. These drugs may sometimes be directed against the principal disease ; but oftener, they may be used to counteract or guard against the accidents, which would aggravate that disease.

“ I have found no difficulty in all this. In some

respects I have, perhaps, had advantages which you do not yet enjoy. . . Though we have good apothecaries, by whom alone medicines are ordinarily put up, — they are strictly men of the shop. They never visit the sick, and do not pretend to practice. They make their charges for medicines alone, and are paid as grocers or other tradespeople are. The physicians (and practitioners generally) charge for their services, whether they order medicine or not. Thus, there are none of the inducements to employ drugs, which exist among a large class of practitioners with you. In our country towns the physicians supply the drugs; still the influence of city customs prevents their resting their emoluments on these; they charge distinctly and mainly for their visits, &c. Again, among the regular practitioners we have not any distinction of classes; though age, &c. give to some men a certain rank, it is very different from what exists with you. We all of us have therefore a chance to get patients at the onset of disease.

“ I have said that I have found no difficulty in satisfying patients without medicines. I began life with a good confidence in certain articles, and more especially in the alterative powers of mer-

curials. The doctrine now prevalent with you as to the power of calomel in acute diseases, especially in inflammation, was familiar to me, and fully believed, when I attended St. Thomas's, in 1799-1800. I used to say to my young friends there, with the true juvenile conviction of superiority, that it was singular Dr. Saunders (William) could be so blind ; in his book, and in his lectures, he advised the use of mercury in acute, as well as in chronic hepatitis ; yet did not see that it ought to be equally useful in other acute inflammations, as I knew that it was. It was some years later that one of your Dr. Hamiltons (in England, not Scotland) first brought forward the general doctrine ; at least, so far as I know. At the present day, I find it maintained by Dr. Watson in his delightful lectures. Now, I am not ready to say that the practice is all wrong. There is perhaps some good in it in some cases ; but when pursued heroically it does a wonderful deal of mischief. Whether it often *causes* a fatal result I will not say ; I think not often ; but it often adds much to the suffering of the patient and to the duration of his *sickness*, if not of his *disease*. I began to perceive this early in my career, but not in its whole extent for more than twenty-five

years. In acute rheumatism I gave up the mercurials within six or eight years after I began ; though it would seem to be the disease, to which it should be most applicable. And, as early as, this I became very careful not to produce a bad sore mouth in any case of disease. But I was a pioneer here ; and I can boast (for I may seem to be boasting) much more of what has been done by younger men — whose modes of philosophizing in medicine I have influenced in some measure — than of my own doings.

“ I must finish by saying, that I am often consulted by people from the country, as well as from the city, in chronic diseases, though I have ceased to be a busy practitioner ; and that I find no difficulty in satisfying a patient, after an hour's lecture upon his mode of life and conversation, without any prescription for medicine. In epilepsy and in phthisis, except so far as symptoms may require to be alleviated, I always tell the patient at once not to employ any drug to remove his disease. But in epilepsy, not evidently from organic disease, and in phthisis at an early period, I venture to say that much alleviation and benefit may be derived from care as to diet, exercise abroad, &c. Do not understand that there is a

precise formula, which I follow in these cases. I try to communicate principles rather than rules, and I find a large proportion of patients can understand me."

NOTE III.

AMONG the sciences, the principles of which it is necessary for the physician to understand, is that of human nature; or, otherwise described, the principles of the philosophy of the human mind and heart. This, strictly and properly, is a branch of human physiology. It is not, however, a branch which is ordinarily brought into view, if it is ever thought of, by our teachers of physiology. The mind has so much to do with the health of the body, the two mutually acting on each other, that an intimate acquaintance with the one is necessary to a full comprehension of the other. A person who is familiar with the characteristics of the mind and heart, is prepared to see how the bodily health is injured and how it is benefited through the medium of the mind. These obvious truths are familiar to medical and non-medical men, whether they are adverted to as much as they should be, or not. But I wish now to bring into view the importance of a knowledge of the

human mind and heart with reference to one branch of the details of a physician's daily duties, which is not perhaps sufficiently regarded. It is a daily business of a physician, an hourly duty, to ascertain, through human testimony, what has occurred to his patients. As far as possible, let the physician get a knowledge of the case before him by the objective signs. Some of our brethren rely on these alone, and scarcely ask a question as to the history of a case presented to them, though they may listen to the story told by the patient or his friends. Now I hold that it is wise to get all the information we can, by our own senses, — to learn in that way all the objective signs of health or disease. For we may be able to get an absolute assurance about these, while there is some difficulty in gaining a certain knowledge of the subjective signs. Yet, ordinarily, it is highly important that we should gain this knowledge, and most of us always seek it. Remember that we must depend upon the patient for an account of these signs, and there are various modes, in which we may be deceived about them. In some instances, strange to say, the patient deceives us designedly, influenced by various motives. But more frequently he misleads us undesignedly. This

happens from an imperfect observation of himself, from forgetfulness, or carelessness in his answers to questions, or very often from a want of accuracy in the use of language. Thus you may ask your patient if he suffers any pain, and he may answer, no, none at all; yet a few minutes afterwards you may gather from him that he often has a headache, or that in the night he is frequently annoyed by cramps in his lower extremities, or that when he coughs he feels a pain in his breast, or side, — or that some pain is induced when he lies down in bed. Even thoughtful and careful people will sometimes assert a universal negative, without being aware of its force. We must then cross-question our patients, and their friends, who assist them in reporting their histories. It is the proper duty of a nurse — (the person who takes care of the sick is to be called the nurse, whether a friend, or a hireling) — it is the proper duty of the nurse to report to the physician, at every one of his visits, whatever has occurred during his absence, in the order of the occurrences. A woman who can take very good care of the sick man, may be quite unable to make a good report from a want of the habit of close observation, or from a want

of the knowledge of language. But, besides, when a nurse is closely questioned, she often answers wrong by design. She may think that she ought to be able to give an answer, when, in reality, she is not; and then she will give some answer, relying on a guess to hide her ignorance. Or, she may fear that an evil, which has occurred, such as a chill, may be attributed to her negligence, and for that reason she will try to keep it from the knowledge of the Doctor; or she may have committed an error in the food, or the medicine, and be afraid to acknowledge it. It requires some address to ascertain the truth, and guard against error from these sources. It behoves the physician always to pursue his inquiries calmly, not using words or tones which will agitate the patient, or the nurse, from apprehension that he will find fault. And, generally, it is unwise in him to reproach the nurse when she has made a mistake. If he do this, she may be unwilling to tell him the truth another time. If the nurse is too negligent, or grossly deficient in her duty, he may take measures to have her discharged. But, however it may seem to show his spirit, it does not belong to him to find fault with her. Let him point out the faults to her

employers when they are too great. For the sake of the patient, it is important to avoid unpleasant discussions in the sick room.

I hope these remarks will not be thought too trivial.

I am tempted to take this occasion to put in print a statement of the merits of a nurse in the Massachusetts General Hospital, who began her career there a few years after it was opened, and after a service of thirty-four years, left that excellent institution a few months since. Trustees and medical men, who have been familiar with the Hospital, will understand at once that I have reference to Miss Rebecca Taylor. I believe that there is not any person living, who has been connected with the hospital for so many years, — perhaps I may say for half as many years, as she was. If any person is to be excepted, it is myself. From the day on which the house was opened to this day, about forty years, I have been nominally connected with it; and, so far as a strong interest in it is concerned, I have been connected with it from the first conception of its establishment. But my active service in it extended only through its first fifteen years. Since then, for about twenty-five years, I have been

only a consulting physician. But my excellent friend, Miss Taylor, gave her personal services, with occasional visits to the country for health's sake, for the whole period of thirty-four years; and this in the office of head nurse, doing all its duties till a few of the last years of her service. It is certain that she would not have been retained in office so long, if she had not merited some distinction. All, who have known her, will remember the great modesty of her deportment. She never obtruded herself on the notice of any one, and never claimed any distinction. It has long been my remark that physicians and nurses might be divided into two classes; viz: those who keep in view their own glory, and those who look only to the welfare of the patients under their care. Miss Taylor was of the last class. With most of us there is experienced a regard to both the considerations above mentioned. With her I never saw that she thought at all of her own glory. She was uniformly devoted to the sick in her wards, in the most quiet manner, and most tenderly too; but she never substituted terms of endearment for faithful and punctual attendance. I remember that she committed mistakes in administering medicines twice. Both

times, when I inquired into the circumstances, she told me at once, in a distinct voice, "It was my fault, sir." She would have been unhappy, if she could not have made the avowal of her errors. I do not doubt that she might have explained them away, but she would not attempt to do it. There were two instances, under my observation, in which she had reason to think ill of the characters of patients in her wards. She did her duty towards them ; but it was with a coldness, which she seemed unable to repress. In proportion as her patients were helpless, her attentions to them were more assiduous. I must indulge myself in giving one instance ; the reader may pass it over, if he pleases.

Many years ago there was placed in Miss Taylor's ward a very respectable Dutch woman, who had recently arrived in this country, and could not speak a word of English. She was past fifty years of age, with a smooth and fair countenance, and one expressive of kindness and gentleness. Her good looks might have influenced anybody, and no doubt might have had some effect on our good nurse. As none of us could speak in the Dutch tongue, we obtained help from two learned Germans ; but, after four or five days, we were

able to relieve them from further attendance. At that time, Miss Taylor had established a language of signs with the patient, and watched her so closely, that she was able to give us a very satisfactory account of the case from day to day, and with her intervention the management of the case was so successful, that the patient was dismissed well after a week or two. Meanwhile our Dutch woman learned to speak two words of imperfect English, which she repeated daily, pointing to our Miss Taylor. These words were "too goot, — too goot."

I will add, that I reminded Miss Taylor of this case lately, when I called to see her before she left the hospital. She remembered it, and told me that in other instances she had not found it difficult to maintain a satisfactory intercourse with patients, who could not speak our language. It is obvious that this could not happen without the most devoted attention on the part of the nurse.

There is not any comparison to be made between our good nurse and Miss Nightingale. The latter is a lady of education, and in a different rank in life. She sees how important is the office of a nurse. She has studied the duties, I may say the high duties of a nurse for the sick. She

has brought science to her aid, and she has the energy to teach the operatives the way to do their work, and the care and fidelity requisite to do it effectually. I have no doubt she has set examples to her pupils in the hospitals, in which she has taken the oversight of the patients. It is evident from her writings that she has not been a mere looker-on. My friend is one of much humbler pretensions. She has been a hired nurse. She sought an employment for her living. Having gained an appointment, she gave herself to her duties. Filled with a sense of duty, she brought all her faculties into exercise, without bustle, and without parade. She did not think of reputation, of gaining a character. She must have had system and industry, for I always found her work was done in proper season. Her fidelity, her tenderness—her patience, were proved by the uniform satisfaction shown by the sick under her care. One, who saw her casually, might think her cold. Her manners were always calm. She was never in a hurry; rarely, if ever, agitated. But the strength and warmth of her feelings were shown by the constancy and tenderness, with which she performed the trying duties of her office; hence the confidence which was placed in her by her patients.

Miss Taylor is a small woman, but well proportioned. She is not slender, and never showed weakness, though not fitted for hard and heavy labor. She is well formed ; but the contour is derived entirely from the muscles, while there is none of the rotundity caused by adipose matter near the surface. Her face is thin, the features well defined, her nose and chin distinctly prominent, her eyes blue, decidedly handsome, and, with her mouth, full of expression. Everything about her shows calmness and composure of mind. She uses few words, but they are apposite, very definite, and are uttered distinctly. Though she never shows any violence in her manners, she manifests, at all times, so much firmness that, as I suspect, she has rarely met with any resistance from those under her control. I never heard that any one complained of her. She seldom found fault with others. I think if any unhappy and captious individual in her ward had found fault with her, all the other inmates of it would, at once, have risen up in her defence. At one time a very excellent and intelligent woman, whom I had recommended for some years as a private, or family nurse, became very sick, and was brought to our hospital in a dreadful and helpless state.

She was palsied, and had extensive bedsores at the time of her admission, so as to be very offensive. She retained her mental faculties, and was well qualified to criticize a nurse. "Oh, sir," she would exclaim to me, "you don't know,—nobody knows,—what an excellent nurse and what an excellent woman Becky Taylor is!"

But I will stop. I have always known how difficult the duty of a nurse is; how much it requires to make a good one. It has been my practice to praise and encourage every one, whom I found capable of doing well. I have known many good ones in private families. It is harder to perform well and faithfully the nursing in a hospital. I have been describing one the most uniformly faithful, fulfilling all her duties in the most faultless manner. I have loved many others, but I have loved her the most. I avail myself gladly of an opportunity to leave behind me this testimony to her merits. Her best reward is in her own breast. She must know that she tried to do her whole duty. It is for others to say how well she succeeded. It may gratify her, in her retirement, to read what I have written. I am happy to know that she reciprocates my friendship. But it is not to gratify her that I have done this. It

is a pleasure to bear testimony in favor of one so good. I cannot help hoping that it will be useful to hold up such an example for imitation. And, I will add, that, so far as my influence can go, I wish to point out how high are the duties of a nurse ; and how justly they entitle one, who performs them skilfully and faithfully and kindly, to the love and respect of mankind.

NOTE IV.

MR. PRESCOTT'S CASE.

MY DEAR MR. TICKNOR,

You ask for a statement in respect to the diseases, which affected our late friend, Mr. Prescott. It would not be interesting to relate all the ailments of his life, of which there was the usual variety. His eyes suffered from accident at one time, and, from disease at another ; and the injury as to his sight had a great influence on his life. His days were ended by an affection of the brain.

First, at an early age his eyesight was impaired in such a degree, that one might have supposed that he would at once have abandoned books. Instead of this, he spent his days among them, and became a distinguished scholar, and a distinguished writer.

In his boyhood Prescott was healthy and vigorous. While a sophomore in our University at Cambridge, there occurred a very peculiar accident, by which he lost the sight of his left eye.

[180]

There was a frolic among the undergraduates, in the Commons-hall, after dinner, in which among other things, they used crusts of bread as missiles. One of these, thrown at random, but undoubtedly with great force, struck Prescott upon the globe of the open eye. If the person who threw it had stood in front of him, his eyes would have taken the alarm as the crust approached them, the lids would have closed instantaneously, and then perhaps the injury would have been less severe. But it was not so. He was going out of the hall, but, for some cause turned round suddenly with his eyes open, and the crust, already on its way, met his eye at the moment when he turned. From careful inquiry on the day of the accident, I satisfied myself, that this was the mode of the occurrence, and that, with all the marvellous guards by which the eyes are surrounded, one of his was left exposed to a severe blow on its unprotected and tense surface. The immediate effects were very remarkable. They were such as attend a concussion of the brain. His strength was immediately prostrated, and vomiting took place. As soon as could be, he was brought to his father's house in town, where I saw him within two or three hours of the accident. He was on the bed, not feeling

able to sit up ; his face was pale and shrunk, and his skin cool ; but his mind was calm and clear, so that he gave a distinct account of the unfortunate affair. Though the eye was not insensible to light, its power of vision was lost. It did not exhibit any external mark of severe injury, but it seemed that the retina had been paralyzed by the shock. There was, I think, pain in the eye and in the whole head. His pulse was feeble, and his temperature rather below than above that of health. The case did not admit of any active treatment. He was kept quiet, and every precaution taken against irritation, or disturbance. Within a few days, the system recovered from the shock, but the eye never underwent any material change during his subsequent life. He had one good eye left, and all who knew him, know that it was bright enough to give great animation to his expressive countenance.

In due time, he returned to Cambridge, and there pursued his studies through the usual course. So far as I can recollect, he did not experience any trouble in his right eye while at College, nor subsequently, though his whole occupation was over his books, until the period of which I have next to speak. His general health during this time was very good.

On the 15th of January, 1815, he called on me with an inflammation of his right eye. The inflammation was seated on the surface (the *tunica conjunctiva*). He spoke of some pain in moving the eye, which seemed more than is commonly noticed in simple ophthalmia. I directed a saturnine lotion, and some leeches on the temple. These remedies were employed that evening. They seemed sufficient for a recent attack, not showing extreme violence at the time when I saw it; but during the night the pain in the eye became very violent, and the next morning I found the inflammation very seriously increased. The *tunica conjunctiva* was very red, and greatly swollen, so as to exhibit a *chemosis*, the most strongly marked which I ever witnessed before, or since. The cornea had become opaque, and the power of vision was entirely lost. His state gave rise to the most serious apprehensions. To himself, and even to his calm and philosophic father, it seemed that every risk, except that of life itself, must be incurred, to save him from permanent blindness. Such were my own feelings. I retain at this distant day the most vivid recollections of my apprehensions and solicitude in regard to this young man, whom I had known

from his childhood, and for whom I entertained the highest regard.

I should have noted that on the morning of January 16th, his pulse was hard and accelerated, and his skin was very hot. On that day, I bled him freely from the arm twice, purged him and vesicated his neck. At evening, the pain had ceased, but it returned with great severity during the night. I called in consultation my friend Dr. John C. Warren, on that day. For five days the inflammation continued with great fury; and during this time he lost by general and local bleeding more than seven pounds of blood, was purged abundantly, was blistered freely, was kept in the dark, and on the lowest diet; also the vessels of the conjunctiva were divided twice, with a view to arrest the disease in the *cornea*. This part mended during these five days, but the aqueous humor became turbid. On the sixth day the disease was yielding in all parts, and on the seventh it had greatly subsided. The cornea and aqueous humor were very soon restored to their usual transparency; but the powers of vision were scarcely mended, owing as we presumed, to an affection of the *retina*.

Thus far, nothing had appeared except an in-

inflammation in the eye, changing rapidly from one tissue to another; this inflammation being extremely violent, notwithstanding the most vigorous treatment. An inflammation so violent, was, of course, attended by strong constitutional symptoms. I ought to note that the iris escaped the disease, so far as we could judge in a dark room and with an opaque cornea. On the sixth day of the disease our apprehensions were greatly abated; the eye was in every respect better except as to the vision, and we promised ourselves an amendment in this respect also. On the morning of the seventh day, also, everything seemed favorable; but before night, Judge Prescott called on me to announce a new trouble. He said that a pain had come in the right knee, which was on the increase, and was attended by some redness and swelling. To Mr. Prescott's surprise, I instantly replied, that I was very happy to hear it. Thus far, we had not had any occasion to regard the disease as different, in its nature, from common inflammation; but now it flashed on me that the inflammation was rheumatic.

I must take the liberty to state the grounds, on which I came to this sudden conclusion. It had long been known that in some cases of acute

rheumatism, (or rheumatic fever, as it was most commonly called,) the disease was not limited entirely to the various tissues about the joints and muscles, but that it likewise affected the different tissues of the heart and the lungs. But it was not known to me that any one had ever believed that it affected also the tissues of the eyes, unless perhaps the muscles appertaining to them. I had, however, been satisfied that such an affection of the eyes sometimes took place. I had seen some cases, of which one was very clearly marked, in which the ophthalmia was rheumatic in its character. In acute rheumatism we find the different joints, or different muscles, affected in succession, sometimes two or more parts at once. Now in cases, which had occurred before that of our friend, I had seen the same change of the inflammation from the joints to one, or both eyes; and again from the eyes to some joint. I had also known the eyes to be attacked more than once during the same case, just as an elbow, or a knee may be affected more than once. I had not therefore any doubt that the eye, as well as the heart, was subject to rheumatic inflammation. I had not, however, been able to find in the books any record of similar observations. Let it here be noted that

I refer to acute rheumatism. An affection of the eye in chronic rheumatism, especially of the *tunica sclerótica*, had been observed by different persons. The observations on this affection were scattered, and were not, I believe, at all familiar to practitioners at the time I refer to, viz: in 1815. At the present day, the chronic disease has been mentioned by many writers; though I doubt whether it is now very well known. I find also the bare recognition of an affection of the eye in acute rheumatism in *Le Dictionnaire des Sciences Medicales*, 48th volume, page 548. This volume was published in Paris in the year 1820. In 1816, when I published my paper, from which I shall give a quotation, I had looked in vain among all the medical works within my reach for any recognition of such a case. In the volume above mentioned of the French Dictionary, the affection of the eye in chronic rheumatism is fully discussed, while its occurrence in the acute disease is mentioned in two lines only. It is certainly very remarkable, that, when I stated my opinion on Mr. Prescott's case to my friend Warren, he at once confirmed it from his own experience. He related the instances, in which he had seen the same thing, giving the names of the parties, as I

did to him those of my patients. In the *New England Journal of Medicine and Surgery* for April, 1816, both of us subsequently published observations on this point.

You may now understand why I was rejoiced to hear from Judge Prescott that his son's knee had become affected with acute rheumatism. This was not because I regarded rheumatic inflammation of the eyes as a slight disease, but because I thought it less likely to be destructive than common inflammation of so severe a character, as we had witnessed in this instance.

“From this period the disease manifested the common symptoms of acute rheumatism, affecting the large joints of the lower extremities for the most part, and occasionally the neck and loins. It continued to renew its attacks with severity for three months, although there was in this time one interval of a month, in which the disease appeared to be subsiding. The eye had two attacks during these three months, the disease leaving the limbs and returning to them again as the eye recovered. The second attack was short but severe, though less so than the first. The third was less severe, but longer. In each of them the blindness was perfect; and in each the disease affected first the

tunica conjunctiva, then the cornea, then the aqueous humor. In one instance the crystalline humor was opaque for a day or two. The changes of structure took place suddenly and subsided suddenly, as happens in respect to the swelling of the joints in this disease.

“When the eye was attacked the second time, blood was drawn from the arm, and in each attack leeches were applied liberally. Vesication was employed almost constantly about the head and on the limbs. Antimonials were given very freely both before and after the real nature of the disease was manifested, — opium was exhibited p. r. n. — and in the course of the disease cinchona was tried very fully. The strength of the patient was less reduced than might be expected from the evacuations made, and he was never so much prostrated as is common in acute rheumatism. Great care was taken in the use of both food and medicine not to get the stomach into the irritable state so common in this disease; and although the appetite was lost in the early stage, that organ never lost its tone, and nothing like dyspepsia took place at any period.

“The joints of the upper extremities were almost exempted from disease; but those of the

lower extremities (the knees and ankles) were so severely affected, that the patient was unable to walk a step from the first attack until about the 1st of May. During perhaps the largest part of this time he had very little pain when at rest.

“The power of vision in the rheumatic eye was never restored perfectly ; but the precise state of it was not ascertained until April, when for the first time the light was admitted freely into the patient’s apartment. He then found that there was frequently occurring an appearance of something like the body of a spider, with two wings, passing over his eye at the upper part of the pupil. As there was not any mark of injury in the cornea, nor of change in the humors, this appearance was attributed to an affection of the retina. This opinion was confirmed by the consideration that the power of vision was restored very slowly after each attack, although the opacities had subsided suddenly and rapidly ; and by the statement of the patient that he had frequently noticed this appearance before he mentioned it, and while the room was darkened, but that he thought it was owing to the defect of light in the room.

“In the latter part of April and in May electrical shocks were applied to the head three times a

day. Also mercurials were used moderately — one grain of Calomel every night. The eye recovered partially, but not entirely.

“Mr. P.’s mother has been very often, and at times severely, affected with rheumatism. Two gentlemen, cousins of hers, have been nearly crippled for many years with the same disease, and their eyes have been so much affected, as to have rendered them nearly blind. This affection of the eyes has evidently been connected with the disease in the limbs.”

The foregoing account is derived mostly from the article referred to above in the *New England Journal of Medicine and Surgery*, Vol. 5th, p. 140, the latter part being a literal copy from that article. I will close the history as briefly as I can. In the summer of 1815, Mr. Prescott went to England, and afterwards travelled on the Continent through France, &c. One of his objects was to consult experienced oculists abroad respecting his eyes, with the hope of doing something to help his vision. At that time, Sir Wm. Adams was in great repute in London as an oculist, in consequence of having been very successful in the treatment of purulent ophthalmia. I presume that he was so, but I believe that he

was not so well prepared to meet all the diseases of the eye, as some of his cotemporaries in the English metropolis. Mr. Prescott placed himself under the care of this gentleman. So far as I could discover, he seemed never to have entered into the question of the rheumatic character of the disease in the right eye. He probably thought that this was founded on a mere hypothesis ; although the history of the case, fairly viewed, scarcely admitted any other explanation. Before Mr. P. left this country, I felt assured that his case was not to be influenced by any active, or heroic treatment. Unfortunately, I think, Sir William took a different view of it, and kept his patient for a long time under the use of blue-pill, and saline cathartics in large doses. These were employed not only while Mr. P. remained in London, but subsequently on the continent ; that is, for several months. I rather think that this treatment was sanctioned by some surgeon in Paris. However sanctioned, I consider it certain that the eye was not made better by this active treatment, and that the intestinal canal was materially injured by it ; so much so that his health, through his whole subsequent life, was permanently affected in consequence of it.

I should not have written these lines of censure, if this case, principally on account of the celebrity of its subject, though partly because it is an uncommon one, had not engaged the attention of many medical men. I am the more ready to go so far, because it opens the way to some remarks on the treatment I myself pursued at the commencement of the attack on the right eye. Those who agree with me in my objections to Sir William's treatment, may say that mine, at the time referred to, was equally worthy of censure. Let me then recall the circumstances. When the disease began, I had not any reason to suspect that the inflammation was rheumatic. It is true that I had learned that the eye was susceptible of rheumatic inflammation, but this was to be known only when it occurred in connection with rheumatism in its common seats, in the trunk, or limbs. I had never known the disease to make its *first* attack upon the eye. I may add that I have not known such an instance in the forty-four years which have passed since that period; nor have I heard of any such having been seen by others. At a later period I heard that, when young men, two cousins of Mr. P.'s mother had had rheumatic inflammation of the eyes, and

that one of them had gradually become nearly blind. But of these I had not heard when Mr. P. was sick ; nor, as I believe, were the cases understood at the time when they occurred. I gathered the histories afterwards, and then made the inference as to their true character.

It is then to be remembered that the profuse bleeding was practised on a young and healthy man, who had a most violent inflammation of his only good eye, such as threatened destruction to the delicate tissues of that organ. This evil did not occur, although the eye was permanently injured. I am now fully satisfied that the treatment I adopted was not beneficial. Possibly it prevented still farther mischief to the eye ; but I think it did not, because it did not check the disease of the whole system. The result was certainly unfavorable to the treatment of acute rheumatism by bleeding, a treatment of which I had not thought favorably before. I suspect that there never was a case, in which so much blood was abstracted in the first five days of that disease, as in this. And what was the result ? The disease was greater in its violence, and in its duration, than it is in the average of cases.

I will close the history of the disease in the

right eye by saying that it had diminished so much that he could make some use of it before he went to Europe in 1815 ; although as a matter of precaution he abstained from any great use of it in reading, or writing. There was not any opacity, and undoubtedly the permanent difficulty was mainly, if not entirely, in the retina. In subsequent years he regained the power to use it in some measure, but it always remained greatly impaired. He studied very thoroughly and systematically the influence of everything operating on the organ of vision and was very ingenious in contrivances as to the best mode of using light, and of doing without it. You will probably be led to mention some of these in your history of his life.

From the time of Mr. Prescott's return from his travels abroad, his pursuits were altogether literary, and of course most of his time was passed in his library. He never engaged in active business of any kind. He was however very uniform in taking exercise in the open air, mostly in walking, but at some periods on horseback. Though diligent in his studies, he did not abstain from social intercourse. His disposition would have forbidden this, and his company was so much

coveted, that it would have been very difficult for him to have done so. He never passed his summers in the city. He valued good health, and he succeeded in maintaining it in a certain degree. The transient observer might have considered him as very healthy, so bright was his countenance, and so cheery was his temper. He was however liable to dyspeptic troubles, more or less, and the functions of the colon were performed very sluggishly, from causes I have referred to. But, so far as I can recollect, he never had any serious disease, by which he was confined to the house, until the occurrence of the disease in his head. This was on the fourth of February, 1858. For a year, or more, he had been annoyed by headache more frequently than usual, and this had sometimes been quite severe. He had likewise had frequent flushings of the face, sometimes amounting to an unusual redness, through a great part of the day. He mentioned these things to me, and on two or three occasions called my attention to them in an especial manner: But they rarely interrupted his habitual labors, and did not materially interfere with the common bodily functions. I did not regard the complaints as trivial, yet they did not seem to demand the aid

of medicine, and I advised only the precautions as to diet and regimen, which would naturally suggest themselves. On the fourth of Feb. 1858, I was summoned to him in haste, when I found him on his couch, and heard the following story.

He had not appeared well the evening of the preceding day. He then complained of headache, and of numbness in his right leg. He was heavy and sleepy. His wife read to him something sufficiently agreeable, but he did not take an interest in it; he was so sleepy that she stopped reading. He attempted to write a note, not on any complicated affair, but gave it up, because he became confused. The next morning he said that he was sensible of something unusual the preceding evening, that his mind was in some way overcome, and especially that he could not remember names. None of these things arrested great attention at the time, as he was able to rouse himself, and then seemed well enough. On referring to these things in the morning he seemed depressed in his spirits. But after a while he became bright and cheerful, and pursued his usual course. At the accustomed hour he went to walk, but on his return he showed some uneasiness at not finding Mrs. Prescott at home. The maid-servant noted

that he did not appear well, and was led to render him unusual attentions. He went up stairs, and ordering some articles to be brought to him as a lunch. He subsequently said, that before reaching his library, he felt some failure in his legs, especially in mounting the last few stairs. When the maid entered his room, soon afterwards, she found him looking uncomfortably, and he expressed to her a feeling of uneasiness, and begged her to go for Mrs. Prescott, who was in a neighboring house. On her arrival Mrs. Prescott was satisfied that he had some real malady, and feared it was a paralysis. She got him on a couch and sent for me. This was about 2, P. M. On my arrival, he was on the couch, but not quite prostrate; his head was raised up, and he was looking round with an unnatural expression of countenance, and seeming to be bewildered; yet he evidently knew those about him. He attempted to speak, but was unable to command words, and his utterance was very imperfect and indistinct. He seemed, however, to understand in some measure what was said to him, and complied, as to his movements, with our requests. He was able to move all his limbs, but the command of his right hand and arm was evidently not so perfect, as that

of the other limbs. He had some retching and nausea. He had complained that he was weary, and had had some twitching of the limbs. He was not flushed; his respiration was not labored, though it had the irregularity attending emotion of the mind, and his pulse was nearly normal. I had him placed on a bed, after removing his superfluous dress, and after a little deliberation I decided not to bleed him, but to administer Ipecac as an emetic. He took three doses of the powder, a scruple each, and after a long interval he vomited rather copiously. He did not throw off any food, but only the liquids of the stomach, with some bile. The strong excitement of the stomach seemed evidently to be salutary. Almost immediately after it he got a better use of the organs of speech, and his mind became more clear. He mended during the evening, and his night was tranquil.

The next morning I found him in a state comparatively comfortable, up and dressed. Generally his senses and intelligence were satisfactory, but his eyesight was more than usually imperfect. In attempting to read, he said the words became confused, and especially he noted that some one or more of the words would drop down from one line

to a lower one. This difficulty continued for many weeks, but gradually diminished. By degrees, he seemed capable of bringing up the word which had fallen out of its place, and sometimes instead of a whole word, one letter only would fall down. On the same day, or soon after, he noticed some peculiar *spectra*, and these continued to return for many days. They would appear while he was wide awake, in full day-light, and with his friends about him. Principally he noted that certain gentlemen, neatly dressed in black, would march round the room in regular order, and gradually slide out of sight. He would say, "There go my gentlemen," or words to that effect.

To the common *muscæ volitantes* he had been accustomed from the period of his rheumatic fever, under some varieties of form. These continued and increased somewhat. On the 5th of February, the morning after his attack, he inquired into and discussed the history and nature of his disease, telling us all that he could recollect of it. He was never satisfied, when at all unwell, without the most full explanation of his symptoms. I did not attempt to hide from him the true character of his present disease; on the contrary, I

wished him to be sensible of it, that he might know how strong were the inducements to comply with my prescriptions. I told him that his disease was apoplexy, though very slight in degree, and that a repetition of it was to be feared. I explained to him the advantage of placing his reliance on diet and regimen, rather than on drugs and medical treatment. Especially, I stated the benefit from an entire abstinence from animal food. I also advised an abstinence from vinous and spirituous liquors. He entered into my plan with great readiness and adhered to it very steadily. He also, at my suggestion, gave up his books and his pen, and avoided all intellectual efforts and all moral excitements.

He very soon got abroad, and he returned gradually to his accustomed walks, and cautiously resumed a pleasant intercourse with his friends. Such, however, were his habits of industry that the time hung heavily on his hands, so that in three months after his attack, I advised him to resume his studies, provided that this should be done in a very moderate and gradual manner. Subsequently, he had the little variations in his feelings common to all men, whose vigor is in any measure impaired. But on the whole, his health

was getting more perfect, through the succeeding summer and autumn. When he returned from the country in November, his appearance was very satisfactory. The flushing of his face had disappeared, and his headaches had very much diminished, from the period of his sickness in February. His muscular strength was very good, though not quite so great as in the preceding years. His walks amounted to four or five miles a day. He had gone through much literary labor, and in December he brought out the third volume of Philip the Second. We were greatly encouraged. He was not free from headache, and occasionally spoke of some unfavorable symptoms; but he was on the watch for such, though he maintained a cheerful spirit. He never recovered fully the hilarity, for which he had been so much distinguished during his life, and perhaps his mind was less rapid in its operations than formerly. But, if not hurried, his intellect was equal to its accustomed tasks, and I believe that the most exact critic would not discover in the printed sheets any evidence that its author was incapable of what he had undertaken. He distrusted himself at times, but he could not show that he had made any real false step.

After the publication of his last volume, Mr. Prescott allowed himself a little vacation before entering on a new task. During this time he learnt with how much pleasure and delight the new volume had been received and criticized by those, who were most competent to estimate its merits. But, after a few weeks, he began to look with feelings of pleasure to the renewal of his studies, and on the morning of the 28th of January last, he stated to his wife that it was time for him to begin, and that he felt prepared. On that very day, about noon, the great change occurred. He was for the moment alone, in a closet, when his faithful secretary heard an unusual sound there. He went to him immediately, and found him in a state of complete apoplexy. He was entirely insensible, he performed no voluntary motion, and his respiration soon, if not at first, became stertorous. His whole face was changed; his features were altered; all influence of the mind upon them had ceased. He continued in this state between two or three hours, and then expired, surrounded by those he most loved. With what feelings the result was witnessed by them, and what impression it made on the community as the news was spread abroad, how every one

felt the great void that was left, it belongs to you, my dear sir, to tell. Allow me a few remarks on the case as viewed medically.

It would perhaps have been sufficient, my dear Mr. Ticknor, if I had confined myself to a brief and plain statement of the morbid affections which occurred in our lamented friend ;— of the imperfect vision, apparently an obstacle to all literary pursuits, but which did not prevent the most extensive researches, and the most minute scrutiny in the fields of learning ;— and of the lesion of the brain, ultimately of the fatal affection of that organ, by which in an instant a mind so enlarged, so powerful, so comprehensive, so splendid in its manifestations, so adorned by moral beauty,— by which, in one instant this mind,— not one last look allowed even for those most tenderly beloved, — was at once separated from all that is earthly. But let me not seem to lament the mode of his death, by which it would almost seem as if a kind Providence had granted his repeated prayer ; by which he was saved the pangs of a separation he dreaded to meet.

I have allowed myself to go out of my path. I meant only to apologize for the length and minuteness of detail, in which I have indulged

myself, and of the discussion even of the propriety of the treatment adopted in Mr. Prescott's case. I know it is more than most readers will care for. I hope, therefore, that you will put this letter into an appendix, where it may be found by those, who desire to see it. I could not write it without realizing that medical men, as well as others, would be interested in the life of Mr. Prescott, and I wished to give them satisfaction as regards the details of his case, viewed professionally. It is, in reality, very interesting as a medical case. And now, for them, I wish to add a few more words; such, I mean, as relate to the treatment after the first apoplectic attack.

I have elsewhere* given to professional readers my views on the importance of diet in warding off a second attack of paralysis; such attacks as are very commonly due to sudden hemorrhages within the cranium. These hemorrhages cause perfect apoplexy when they arrive at a certain amount, but when more slight, they cause paralysis only. My experience has led me gradually to the belief that the risk of a recurrence of the hemorrhage may be much diminished by entire

* Letters to a Young Physician.

abstinence from animal food. I do not, in every case, regard an entire abstinence from diffusible stimulants so essential, as the abstinence from the food in which nitrogen most abounds. In various instances I have adopted this practice with favorable results, and among them were men very near and dear to me. I did indulge a strong hope in the case of our friend, that I should be gratified with a like result, though I never supposed that the same could happen in every instance. I was able to infuse into his mind much of the same hope. I have suffered a most grievous disappointment. But I trust one failure, though in a very memorable case, will not deter my brethren from a trial of the same mode of treatment. More experience is required to decide its merits. But, let it be noted, it is not attended by the hazards of a powerful drug.

I am, my dear Sir,

Very sincerely, your friend,

JAMES JACKSON.

GEORGE TICKNOR, Esq.

HAMILTON PLACE, June 1st, 1859.

MEMOIR
ON THE
LAST SICKNESS OF
GENERAL WASHINGTON
AND ITS
TREATMENT BY THE ATTENDANT PHYSICIANS.

MEMOIR.

THE death of General Washington took place unexpectedly after an illness of less than forty-eight hours. He was in his sixty-eighth year, but had not begun to show much of the infirmities of age. Under the exposures of the active period of his life, and again shortly after he had engaged in the heavy cares and responsibilities of office in 1789, he had undergone severe acute diseases ; but it does not appear that he had been suffering under any wearing or wasting chronic malady. His faithful biographer, Mr. Sparks, says of him, that "Since his retirement from the presidency, his health had been remarkably good ; and although age had not come without its infirmities, yet he was able to endure fatigue, and make exertions of body and mind with scarcely less ease and activity than he had done in the prime of his strength." * Such being the case, the circumstances of his short disease, its character

* Sparks's *Life of Washington*, p. 528.

viewed scientifically, and the treatment adopted by his physicians, have all been ascertained and discussed; and the remedies employed have been spoken of by some persons in terms of strong approbation.

We derive the only original account of his disease from a statement made out by Colonel Lear within twenty-four hours after his decease, with an attestation to the correctness of this account made at the time, "so far as he could recollect," by his excellent friend and physician, Dr. Craik. This account has the appearance of accuracy and fidelity. It is consistent with itself, and accords with what is now known to belong to the disease, which cut short the days of this great man.

On the 12th of December, 1799, he was abroad on his farms, on horseback, from 10 o'clock, A. M. to 3, P. M.; and "soon after he went out the weather became very bad; rain, hail, and snow falling alternately, with a cold wind." To the watchful eyes of his family there were no appearances of disease, though they looked for them, until the next day. He then complained of a sore throat, and it became evident that he had taken cold; "he had a hoarseness, which in-

creased in the evening ; but he made light of it." So far from feeling anything like serious illness on this 13th of December, he seems to have been kept from "riding out, as usual," only by a snow-storm. In the afternoon he went out of the house to look after some work, which was not of an urgent character. He passed his evening as usual, and did not seem to be aware that his cold was uncommonly severe. When Colonel Lear proposed at bedtime that he should take "something to remove his cold," he answered, "No, you know I never take anything for a cold ; let it go as it came."

It was in this night that his sickness arrested his attention. He was taken with an ague, and, between two and three o'clock on Saturday morning, (the 14th,) he awoke Mrs. Washington and told her that he was very unwell. He then had great difficulty in *breathing, speaking and swallowing*. These are the symptoms which are characteristics, the essential characteristics, of his disease. They continued till his death, which took place between 10 and 11 o'clock in the following night. There seem to have been some hours during which he did not swallow anything, in consequence of the distress attending any effort to do it. It was

also so difficult to speak, that he did that only when he thought it important, and as briefly as was consistent with his habitual care to be distinct and definite in his expressions. It was the breathing, however, which caused him most distress. In regard to that the patient cannot choose, as he can in respect to speaking and swallowing. The efforts, which he was compelled to make in breathing, were extremely distressing, and occasioned great restlessness ;—the more because his strongest efforts were insufficient to supply his lungs with as much air as his system had need of. It was from the inability to do this that death ensued. He was in fact strangled by the closure of the windpipe, as much as if a tight cord had been twisted around his neck. His intellect remained unclouded, and it is needless to say that he showed to the last those strong and great characteristics of mind and heart, by which his whole life had been marked.

What was this disease which cut down a strong man in so short a time ? It was such as has cut down very many, no doubt, in times past ; but it is a rare disease. It had not, at the time of Washington's death, been clearly described, so as to be distinguished from other diseases about the

throat. It is now well known under the name of *acute laryngitis* ; — inflammation of the larynx, — the upper part of the windpipe. It was about 1810 that this morbid affection was first brought into notice and distinctly described by Dr. Matthew Baillie, of London, confessedly, while he lived, at the head of his profession in that great city. He published two cases seen by himself, both of them within a short period, both in medical men, and one of these a very dear friend of his. To these cases he added a third reported to him by a practitioner in London, which was evidently like the other two. He ascertained the morbid changes, by which these persons had been suddenly deprived of life, by examinations after death. It was ascertained by these examinations, as it has been by many made since in similar cases, that the disease consists in an inflammation in the mucous membrane of the whole larynx, including the epiglottis ; but that this inflammation is not limited to the mucous membrane. It extends to the cellular membrane subjacent to the other, indeed to all the soft parts, including the muscles ; and perhaps, in some degree, to the cartilages. From these morbid changes the epiglottis is disabled from the free and ready motion

essential to its office, which is that of guarding the windpipe from the admission of substances passing through the pharynx. Hence one of the difficulties in swallowing; probably the greatest. In such a state the attempt to swallow any substance, liquid or solid, would be attended by an instinctive effort of the epiglottis to shut up the larynx, as it always does in health during the act of swallowing. But this instinctive effort must cost great pain; and it is an effort which could not succeed in the most severe state of the disease. Thus the principal difficulty in swallowing is explained. Another difficulty in swallowing arises from the state of the pharynx. The inflammation of the larynx passing over its posterior part, in some if not all cases, spreads to the pharynx, and disables that part from performing its office in carrying down the liquids or solids brought to it.

Just below the entrance to the larynx we find the delicate structures belonging to the organ of the voice, and here is the narrowest part of the air tube. In these parts, a common acute inflammation of their mucous membrane will cause soreness and hoarseness; but when the disease extends to the subjacent cellular membrane, so that all these parts are thickened by the distension of

the small bloodvessels, and the more if there take place an effusion of any fluid into this cellular membrane, it is seen at once how these soft parts must be swollen. Now this swelling occasions a difficulty, if not an impossibility, of motion in the delicate parts belonging to the organ of the voice, and accounts for the difficulty and at length the impossibility of speaking. At the same time we see how the passage of the air is impeded, and at last entirely obstructed, producing the difficulty of breathing and at length the strangulation.

Thus this disease, so suddenly destructive of life, is among the most simple in its nature. One readily understands that his fingers may be inflamed, that is, become red, swollen, indurated in all the soft parts, and painful, to such a degree as to make motion in them very difficult and at length impossible. But all this may take place without interfering with functions important to life. But let the organs by which the voice is formed and through which the air must be passed for the supply of the lungs, — the organs through which the breath of life must have an open road, — let these organs be swollen and rigid so as to block up this passage, and we

readily comprehend that life may be arrested in young or old, in the strong as well as in the feeble, in a very short space of time. It follows that the only question in a disease of this kind, as it occurs in adults, is whether we can prevent or remove the fatal obstruction, which has been described as characteristic of this disease.

There are, however, some further remarks to be made on the disease, before discussing the treatment of it. Any one conversant with the subject will see at once how much acute laryngitis resembles the common affection, which we all know as a sore throat from a cold. Though the words *a cold* are employed with reference to any disease, which is thought to arise from an exposure to a change of temperature, or to cold and damp weather, they are most commonly used in reference to an attack in the nose, or in the windpipe. These are called colds in the head, or colds in the throat. The cold in the throat is marked by a sense of slight soreness in that part, especially felt in deglutition and in coughing, and by hoarseness in the voice. Some cough soon follows and presently an expectoration of matter, at first watery and afterwards thick and glutinous, and more or less opaque. In these

cases there is an inflammation of the mucous membrane of the larynx. The disease may begin in the nasal passages, when it is commonly called a cold in the head, or a nasal catarrh; and this does most frequently take place first; but whichever part is affected first, the inflammation may extend from this to the other. Further, when the larynx is affected, the inflammation may also pass downward to the bronchi, which are the ramifications of the windpipe in the lungs. Then the disease gets the name of pulmonary catarrh, or bronchitis.

To one who understands the above statement, it will be plain that the cold in the throat, when there take place soreness in the throat, hoarseness, a slight difficulty in deglutition, and more or less cough,—in other words, *a hoarse sore throat*, is the same thing as the acute laryngitis. It is assuredly the same thing, except in degree. In the disease first described, the *laryngitis*, the inflammation is more severe, and it is not confined to the mucous membrane, but extends to the other tissues. The mucous membrane may be called an internal skin; and like the skin it is connected with other parts by a cellular membrane. Now if the skin be inflamed in its ex-

ternal surface only, in one man, and in another an inflammation of the skin should pass through it into the subjacent cellular membrane, the swelling would be much more in this last case than in the first. The greater swelling in the second case would be attended with more general affection of the system than would occur in the first one. So far the difference between the common affection of the larynx, in ordinary colds, and that in the severe disease under consideration, is illustrated by the supposed inflammation in the skin in the two men. But there is one great difference. The swelling of the skin is not productive of any serious inconvenience; not so in the larynx. That is the tube through which the air passes to the lungs in respiration, and in one part the passage is very narrow. In this part the swelling must occupy the calibre of the tube; in fatal cases it fills up the air passage; and the effect of this is the same as if a cord were tied very tightly around the neck. As the passage is filling up, the air passes with more and more difficulty, and at last it cannot pass at all. Even this, however, does not state quite the whole. In the last hours of life, the lungs do not get air enough to produce the requisite change in

the blood ; and likewise the carbonic acid gas, which is an excretion from the blood, and is usually discharged at once from the lungs, is retained in some measure and acts as a poison. From this imperfect renewal of the blood, if we may use the expression, arises the livid countenance in the last hours ; and, under this state of the blood, every part of the body is constantly losing its vigor. Thus, before the larynx is absolutely blocked up, the muscles of respiration become incapable of the effort requisite to expand the thorax, and death ensues, although there may be a very small passage still left open at the last moment of life.

We are prepared now to consider the treatment proper in acute laryngitis, in connection with that adopted in the case under consideration. It has been thought by many persons, medical and non-medical, that General Washington was not treated judiciously ; and some, perhaps, believe that by a different treatment his life might have been preserved. Sixty years have passed since his decease, and the disease, which was fatal to him, is understood now much more perfectly than it was in 1799. To what result have we arrived ? Has any treatment proved to be more successful than

that adopted in his case? He was bled, he was blistered, and calomel and antimony were administered internally. Whether these remedies were employed early enough, and whether to too great an extent, or not sufficiently, are questions to which we will return presently.

What was the treatment adopted by Dr. Baillie in the cases of his medical friends? He directed bleeding, both general and local, and his patients not only agreed with him, but, being medical men, directed it for themselves in his absence. This happened at a period comparatively near to that of Washington's case.

What do the best teachers say at the present day? To answer this question fully and accurately would require great research. One need not, however, hesitate to say, generally, that they recommend bleeding and blistering. In addition, the English teachers advise the use of mercurials carried to the point of salivation, and our own did the same until very lately. Some of them, perhaps, do it now. Some, if not many, would add antimony and opium to the calomel, or other preparations of mercury.

We believe that the lectures by Dr. Watson of London are received as good authority, by as

many persons who speak the English language, as the work of any writer of our time on the theory and practice of medicine. In the last edition of his lectures he advises bleeding freely at an early period of acute laryngitis, with the qualifications which every discreet and experienced practitioner would assent to. So far, then, it would seem that the treatment adopted by Dr. Craik and his medical coadjutors is the same which has been, and is now, directed by physicians of the first standing.

Let us look into this matter somewhat, and see whether blood-letting in acute laryngitis appears to be a rational practice. To what cause is the danger to life to be attributed in this disease? The answer has already been given. The danger arises from the filling up of a part of the windpipe. In what way, or by what material is the windpipe filled up? By an extra quantity of blood in the small vessels of the part, similar to what most persons may have seen in a violent inflammation of the external surface of the eye. By this blood in the first instance, and in part, is the tube filled up; but further, by the effusion under the mucous membrane of the larynx of a watery liquid, called serum, or serous fluid. When

a man is bled largely, he usually becomes pale. This happens because the small vessels of the external surface contract under the loss of blood, and the skin is seen to be white, or sallow, according to the complexion of the individual. If, in the disease under consideration, the small blood-vessels in the morbid part will contract as those of the skin do, after the abstraction of blood, we may hope for relief, as long as that contraction is maintained. Not only so; it will be found that if this contraction takes place in the diseased part, the effusion of serous fluid is more readily absorbed than it would otherwise be.

It must be confessed that the effect, here described, on the small blood-vessels in the morbid part, is not certain to take place in consequence of the loss of blood. The success of the measure depends mainly on the period of disease, at which the bleeding takes place. The chance of success is great in the very beginning of the inflammatory process; but it is less, the later the period at which the remedy is employed. There is not, however, any other measure by which effectual relief is so likely to be produced as by blood-letting. If anything else can be equally effectual, in so short a space of time, it must be some local

applications to the part affected. There are cases of disease in the larynx, where nitrate of silver and other articles may perhaps be applied to the parts affected, with great benefit. But in the irritable state of the part in question, in this acute disease, such applications must be attended with very great difficulty, and apparently with great hazard. The success of this treatment in cases of ulceration in the mucous membrane of the larynx, in a chronic disease, does not prove what would happen in the acute disease under consideration.

But there is a difficulty which ordinarily attends the bleeding in this disease, to which may be attributed the failure in the largest proportion of cases, in which it has been tried. It is that the disease usually commences under the familiar form of a common cold in the throat, so that at first no alarm is felt. Nor ought there to be an alarm in such a case. It has been shown above that such an inflammation as occurs in a common *hoarse cold*, may suddenly increase in importance by extending from the mucous membrane or tissue, to the surrounding tissues, especially to the subjacent cellular membrane. Thence comes the tumefaction, which, acting mechanically, blocks up the

passage of the air into the lungs. It is in this first stage, before the fatal extension of the inflammation has occurred, that the disease might be the most easily arrested. But who would advise the active treatment requisite for this purpose in every case of a *hoarse cold*, which is the first stage? In every such case the severe disease may ensue. But what is the chance that it will ensue? A very large proportion of persons, probably three quarters of the community among us, have such a cold once a year, and not a few have such an attack twice or three times in a year; but the change into the severe disease, called acute laryngitis, is among the most rare occurrences. It does not take place in one case out of a million. But if it happened in one case in a hundred, it would not be justifiable to resort to a severe treatment in each one of a hundred cases, in order to save one of them from the fatal change. There is no doubt that every discreet man would choose to incur the slight hazard of the severe disease, rather than to resort to a copious bleeding every time he had a hoarse sore throat. Washington was evidently familiar with a cold in his throat in his sixty-eighth year, as other men are. He probably had never suspected the possible issue of

such a cold. But if he had been told that the chance of such an issue was one in a million, or even one in a hundred, would he have consented to a copious bleeding? We think not.

Here we see the real difficulty. At the time when the danger is manifested, the disease is not strictly new; it has not just commenced. In looking over the histories of cases of acute laryngitis, we find that the disease, under the form of a hoarse cold, has existed from a few hours to a few days, before it arrives at the state when danger to life is suspected. It cannot be said that the bleeding, at that stage of the disease, can be relied on, as it might have been in the very commencement. Yet this remedy, even then, affords a chance of relief, and the more when the disease has not remained long in the first stage. In Washington's case the first stage was of short duration. Bleeding was resorted to early, by his own direction. But that bleeding was nominal. His wife objected to it, because the patient was old, and the bleeding had not been directed by a physician. We must give her the credit of exercising a wise caution. Of course she did not understand the nature of the disease; she did not suspect how rapidly it was pressing forward to a fatal ter-

mination. Even the delay of the three or four hours which had already passed away since he waked her in the night, was a most serious loss. When Dr. Craik reached him, some hours afterwards, he prescribed a new venesection. He was right; it is in such circumstances that the *anceps remedium* is justifiable. What would medical critics, what would posterity have said, if this good doctor, when such a patient was in his hands, in imminent danger from an affection which was manifestly due to an inflammation, had folded his arms, and said, "There is no possibility of giving relief; but you may let him inhale the vapor from some herb tea?"

Although bloodletting is the great remedy, there are other modes of treatment which may be employed in aid of it, or without it. Calomel and antimony, usually with the addition of opium, are thought by many physicians to be proper articles for the relief of this laryngitis. Colonel Lear says that calomel and antimony were given to General Washington, but he does not say in what doses, nor whether more than once. There is not any reason to believe that they were given in large doses; though I think Dr. Craik and his coadjutors have been re-

proached on this score. In 1799 the use of mercurials in inflammatory diseases was very rare, I believe, in Great Britain, though it was very common in this country. At the present day the reverse is true. At least in New England the practice is now relied on much less than in old England. Fashions change, it must be acknowledged, in medicine as in other things. Probably the result, at the end of another fifty years, will be that mercurials will not be administered in either country as freely, as they have been heretofore; but that they will not be abandoned altogether.

It would not be well to go further into the subject on this occasion. We have considered the bloodletting more fully perhaps than was quite necessary, but it has been to defend the reputation of Dr. Craik and his medical friends, who we think did as well, at least, as any of their critics would have done. We must acknowledge an unwillingness not to think well of Dr. Craik, who was the personal friend of Washington through his life.

Passing by some other modes of treatment for acute laryngitis, we should not omit to notice one, on which much reliance is placed at the

present day, when it becomes obvious that all other remedies are ineffectual. This consists in an opening into the trachea, below the diseased part. In this way life may be prolonged while a chance is afforded for the subsidence of the disease by a natural process, after which the wound may be allowed to heal up. This practice has been resorted to with success in various instances of obstructions in the windpipe, and especially of late in croup. In this disease of children and in the acute laryngitis of adults, it is important that the surgical operation should be performed, before the vital powers have been too much exhausted, by the painful and wearing struggles for life.

But it is time to bring this memoir to a close. On some points the writer has gone into a minute statement of particulars, and into a discussion of principles, as to the pathology and as to the therapeutics. But this has been done only so far as seemed to him necessary to make the subject understood by non-professional men; not with any pretence to bring into view all that relates to the disease or its treatment. If he seem to have lingered on the subject too long, it will be remembered that the interest which

is inspired by every circumstance in the life of Washington, attaches, with melancholy intensity, to the disease by which that life was suddenly brought to a close.

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